

THE

Desert

M A G A Z I N E



DECEMBER, 1948

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DESERT CALENDAR

- Nov. 25-28—Sierra club trip to Split mountain, Vallecito mountains and Colorado desert badlands.
- Nov. 26-28 — Sierra club, Desert Peaks section, climb of Grapevine peak and visit to Death Valley points of interest. Meet at Rhyolite.
- Nov. 27-28—Annual Gem and Rock show, Yavapai Gem and Mineral society, in the display room of the Arizona Power corporation, Prescott, Arizona.
- Dec. 3-5—Second Papago Feast of St. Francis, San Xavier mission. Tucson, Arizona.
- Dec. 5—Illustrated lecture, "Utah, Land of Color," by Dr. E. Leslie Eames. Kodachrome slides. Southwest Museum, Highland Park, Los Angeles, California.
- Dec. 7—Lecture by Dr. H. H. Ninger, director of the American Meteorite museum, sponsored by Yavapai Gem and Mineral society, Prescott, Arizona.
- Dec. 11-12—Processional and feast day of Nuestra Senora de Guadalupe, Santa Fe, and many New Mexican villages.
- Dec. 11-12 — Third annual junior rodeo, Phoenix, Arizona.
- Dec. 12 — Lecture, illustrated with Kodachromes, "Some Southwestern Indian Costumes," by Paul Coze, Southwest Museum, Highland Park, Los Angeles, Calif.
- Dec. 15—Official opening, Arizona Sno Bowl, Flagstaff, Arizona.
- Dec. 18-19—Sierra club trip to Dripping Springs and Palm Canyon. Camp beyond Palm Springs on the Indian reservation.
- Dec. 24—La Posada, Mexican observance of Christmas, Tucson, Arizona.
- Dec. 24 — Spanish Christmas Eve celebrations, Santa Fe, New Mexico.
- Dec. 24—Indian dances after Midnight Mass in the Pueblo mission churches of Santo Domingo, San Felipe, Cochiti, Tesuque, Santa Clara, Jemez and others in New Mexico.
- Dec. 25—Deer dance, Taos Indian pueblo, New Mexico.
- Dec. 25-29—Indian dances at the pueblos of Santo Domingo, San Felipe, Cochiti, Tesuque, Santa Clara, Jemez and others in New Mexico.
- December — Southwest Museum, Highland Park, Los Angeles, California. Special exhibit of books and sketches of Gold Rush days, exhibit of enlarged photos of Peru and Early Inca ruins.



Volume 12

DECEMBER, 1948

Number 2

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The Desert Magazine is published monthly by the Desert Press, Inc., Palm Desert, California. Re-entered as second class matter July 17, 1948 at the post office at Palm Desert, California, under the Act of March 3, 1879. Title registered No. 358865 in U. S. Patent Office, and contents copyrighted 1948 by the Desert Press, Inc. Permission to reproduce contents must be secured from the editor in writing.

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HAROLD and LUCILE WEIGHT, Associate Editors.

Unsolicited manuscripts and photographs submitted cannot be returned or acknowledged unless full return postage is enclosed. Desert Magazine assumes no responsibility for damage or loss of manuscripts or photographs although due care will be exercised. Subscribers should send notice of change of address by the first of the month preceding issue.

SUBSCRIPTION RATES

One Year . . . \$3.00 Two Years . . . \$5.00

Canadian subscriptions 25c extra, foreign 50c extra.

Subscription to Army personnel outside U.S.A. must be mailed in conformity with P.O.D. Order No. 19687.

Address correspondence to Desert Magazine, Palm Desert, California.

LETTERS...

Nevada's First Cotton . . .

Las Vegas, Nevada

Desert:

Just a note to correct a statement you made in your November issue. It states that the 100 acres of cotton raised this year in Pahrump valley was the first cotton raised in that state.

I wish to state that in the early days at Bunkerville, Nevada, lots of cotton was grown. I know, for I helped pick it many times. It was not ginned in Bunkerville, but hauled to the little town of Washington, Utah, where the old gin mill still stands.

MRS. FRED BARNUM

Soothing Agua Caliente Waters . . .

Long Beach, California

Desert:

I read Marshal South's "Healing Waters at Agua Caliente" in the Desert of July, 1941, but didn't make it down there until recently. My Missus tried the waters the first day, but I didn't. I have taken other hot-spring baths for years.

Next day Neighbor Lady and her party arrived. She and my Missus forced me right up the foot trail to the bath house door with the sign "Vacant" on it. I went in and hooked the door. I got the surprise of my life. The water is the most soothing of any I have ever experienced. I backed right up under the flow running in at the head of the tub and let it run down over my back and shoulders. Then I slid forward full length, and wanted to sing. I looked up at the ceiling, only the green leaves and thick branches of a tree. I looked for a bird and grinned at the idea of a bird chirping a lullaby over me in the soothing waters. There are lots of song birds here including mocking-birds. But I guess lullabys for men in bath tubs are seldom heard anywhere.

I dressed and as I unhooked the door, heard a call. Neighbor Lady was hurrying up the trail pointing excitedly up at the mountain sky line. The hot pools are back under an almost perpendicular mountain. Right on the sky line, calmly looking us over, stood a bighorn sheep. A wild one! He had a perfect set of horns. The first sentence of Marshal South's article says the bighorn sheep have gone now. It took about thirty minutes to satisfy his curiosity, or maybe, he was a sentinel for a small band feeding.

Well, I've seen Agua Caliente. I believe I would fit in there for a time pretty well. I plan to go back for a longer stay.

WILLIAM H. MERRILL

Great American Desert . . .

Woodbury, N. J.

With reference to your comment on the extent of the Great American Desert, page 25 of the October D. M., it also includes large areas of southwest Texas. It even extends over a portion of southwestern Colorado.

E. F. WIEGAND

You are correct. Our October issue did not attempt to define the complete limits of the GAD. No exact boundaries have ever been defined, nor could they be with any precision.

—Editor.



"Mac" and Ol' Breezy

Memories of Ol' Breezy . . .

Yucaipa, California

Dear Randall:

From my scrapbook I have torn the only good portrait of "Ol' Breezy," the 1927 Chevrolet whose memory is perpetuated in your anniversary number. She was a grand little buggy, though I doubt if she ever forgave you for declaring she couldn't travel more than 35 miles an hour. But I felt she was vindicated when I wrote a statement in the *Calexico Chronicle* of June 24, 1932, that she had been clocked going 44 miles an hour. I don't think I ever confessed that we were going down hill at the time.

Those early years of association with *Desert Magazine* were the most interesting, exciting and creative in my publishing experience. Financial security which came later, seems much less significant than the friendships established with magazine readers and the conviction that each monthly publication put in permanent form something that might endure.

My scrapbook reveals that the first of the weekly newspaper columns about my desert travels, which eventually led to the launching of *Desert Magazine* was published in the *Calexico Chronicle* October 16, 1930, just 18 years to the day before the impressive opening of your new Palm Desert publishing plant. That first story was about a trip to the volcanic crater of Black Butte in Baja California.

MAC (J. WILSON) MCKENNEY

Mystery of the Gila Monster . . .

Ocotillo, California

Desert:

Having been a resident of Imperial valley, California, for many years I am curious to know why the Gila Monster has not infested this area, since it is found just across the Colorado river in Arizona.

JOHN C. CHALUPNIK

An old prospector once told me he knew the answer to that one. "The reptiles can't swim, an' they're too blamed slow to hitch-hike across on the bridge without gettin' run over." All of which is interesting, but not very scientific. I do not know the answer. Perhaps some of *Desert's* readers, more scientific than my prospector friend, can throw some light on the subject.

—Editor.

Land of Tall Tales . . .

Los Alamos, New Mexico

Desert:

I note on page 20 of the November issue that "Desert does not buy fiction (except Hard Rock Shorty yarns)."

Who says Shorty is fiction? Any Texan will tell you that Shorty's adventures are common occurrences down in Texas.

KELLY CHODA

Could be! . . .

Spokane, Washington

Desert:

Sometimes I think your Hard Rock Shorty is an unmitigated liar.

VILL LARONE

Discovery of Lehman Cave . . .

McGill, Nevada

Desert:

During recent months I have been closely associated with Mr. and Mrs. E. W. Clay at Burbank, Utah. Mr. Clay is nearly 92 and from him I have learned much about the discovery of the Lehman caves.

Mr. Clay knew Absalom Lehman during the late 70's and first visited the cave in 1881. Mr. Lehman discovered the cave in 1878 and was so intrigued with it that he took all his friends into the underground cavity.

It is common report that Mr. Lehman discovered the cave when he accidentally fell through the crust that concealed it while riding horseback. Actually, he was not the original discoverer. His attention was first attracted to the cave when he saw a pole protruding from a hole in the ground. It was about 30 feet long with holes in it into which birch sticks had been driven—an improvised ladder which prospectors had made to get into the cavern. Mr. Clay's first visit was by way of this crude ladder.

Below this hole, on the floor of the cave, was a symmetrically shaped pile of dirt such as would have accumulated from dirt and sand and gravel falling through from the hole above. Many skeletal remains, presumably of Indians, were found in this pile of debris.

EMMA E. FORD

Why Make Your Home in *Palm Desert* ?

People come to live on the desert for many reasons . . . for spacious horizons and gorgeous sunsets . . . for pure air and sunshine . . . for relaxation . . . for escape from the pressure of city living. Almost without exception they look to the desert to provide

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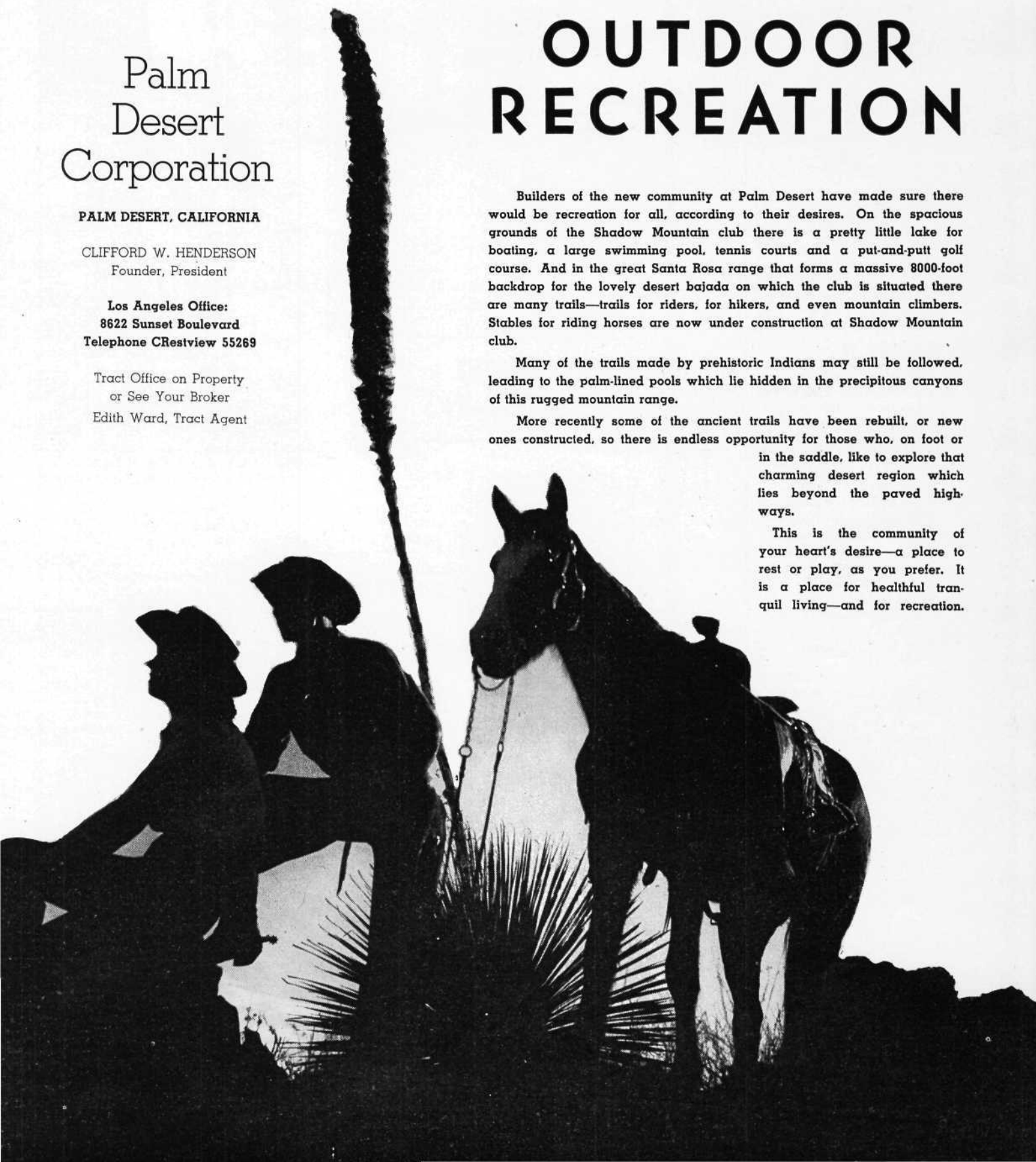
OUTDOOR RECREATION

Builders of the new community at Palm Desert have made sure there would be recreation for all, according to their desires. On the spacious grounds of the Shadow Mountain club there is a pretty little lake for boating, a large swimming pool, tennis courts and a put-and-putt golf course. And in the great Santa Rosa range that forms a massive 8000-foot backdrop for the lovely desert bajada on which the club is situated there are many trails—trails for riders, for hikers, and even mountain climbers. Stables for riding horses are now under construction at Shadow Mountain club.

Many of the trails made by prehistoric Indians may still be followed, leading to the palm-lined pools which lie hidden in the precipitous canyons of this rugged mountain range.

More recently some of the ancient trails have been rebuilt, or new ones constructed, so there is endless opportunity for those who, on foot or in the saddle, like to explore that charming desert region which lies beyond the paved highways.

This is the community of your heart's desire—a place to rest or play, as you prefer. It is a place for healthful tranquil living—and for recreation.





Marshal South (right) with Paul Wilhelm at Thousand Palms oasis in Southern California. Photograph taken in 1942 as Marshal started a 120-mile trek with the burros, Rhett and Scarlett.

On September 29 Marshal South wrote to Desert's staff:

"After being released from the hospital in San Diego the 13th of this month, I suffered a heart relapse and Bill Mushet of the Banner Queen brought me out to his ranch for a few days and then over here to Burro spring, a half mile from Agua Caliente spring. I am very weak, but if a cure is possible the desert will do it. I am working on two articles for Desert Magazine."

The two articles never were finished, for Marshal's condition became worse and he was taken back to Julian where friends took care of him until his death at 7:30 in the evening of October 22.

Funeral services were held in the Baptist church at Julian, California, at 11 a. m., Saturday, October 30, the service being conducted by Rev. Robert Scott Wallace, pastor. The body was laid to rest at Julian beside the grave of Charley McCloud, veteran prospector who spent many years of his life in quest of the legendary lost gold mines of the Southwest.

Marshal South was born in London, England, February 24, 1886. He came to the United States with his parents when five years of age. He traveled widely in United States and Mexico and wrote a number of western fiction books which were published in England.

When the early depression years brought financial reverses, Marshal and Tanya, his second wife, loaded their few belongings into an old car and turned their backs on the California coastal city where they had lived.

They followed a trail that led out into the desert and when the road ended at the base of a mountain along the western rim of the great Cahuilla basin they climbed to the summit, and that was their new home.

They called it Ghost mountain. There was neither water nor housing at the top—but they built a crude shelter of the materials at hand and carried their water from a spring near the base of the mountain. During the first few months they lived vir-

DESERT CLOSE-UPS

tually off the country—as did the Indians before them.

Gradually, through the years, a substantial adobe cabin was built, mainly with water Marshal and Tanya packed up the mountainside on their backs. Later cisterns were built to hold the rain water which occasionally ran off the sheet iron roof of the cottage.

In 1939 the story of their experiment in primitive living on Ghost mountain was published in the Saturday Evening Post and attracted widespread interest. In February, 1940, Marshal began writing for Desert Magazine. His monthly diary covering their life on Ghost mountain became the most popular feature in the magazine, judging by the volume of fan mail.

Marshal and Tanya were poets and their unconventional way of life drew criticism from a few but a great majority of Desert's readers were intensely loyal to the South family. Three children were born during the sojourn on Ghost mountain. Tanya went out to Oceanside for confinement.

It was a great disillusionment then to Desert's readers when in January, 1947, it was announced that the home on Ghost mountain had broken up—that Marshal had moved to Julian and Tanya was asking for divorce. Two talented poets had fallen victim to temperamental differences which grew out of too close association in too small a world. Friends were unable to bring about a reconciliation, and today Tanya is residing in San Diego and the three children, Rider 14, Rudyard 10, and Victoria 8, are in school there.

In April, 1947, Marshal resumed his writing for Desert Magazine, but ill health

that dated back to the days before the separation prevented him from contributing regularly. His last manuscript to Desert Magazine, received two months before his death, appears in this issue.

Mr. and Mrs. Louis B. Botts of Julian and Mr. and Mrs. Wm. Mushet of the Banner Queen ranch were foremost among the friends who cared for Marshal during his months of illness. South's first wife and a son by that marriage, Marshal South Jr., of Torrance, California, helped plan the funeral arrangements.

From vacationing in Monument Valley, Joyce and Josef Muench report a sequel to "When Tombstone Came to Monument Valley," in October, 1948, *Desert*. Twentieth Century Fox film company has presented the \$300,000 set to the Navajo tribal council. The new owners hope that other movie companies will realize the value of ready-made settings against the spectacular scenery of the valley, and will be out to rent the set from them. The funds so received will be spent on projects for the betterment of the entire tribe. And, if extras are needed, Joyce says the Navajo are born actors.

Christine B. MacKenzie, who makes her first appearance in *Desert* with "Artists of Scottsdale," went to work on the *Cleveland Press* after graduation from Hiram college in Ohio and soon had her own society column. "But on that paper you take a crack at everything," she says, "so I've even substituted for the 'love-lorn' editor." With the war, her husband, Red, joined the air force and Christine got a job with Bell Aircraft and learned to repair aircraft instruments and then worked in the experimental division. She left the job to follow Red from one air field to another as he learned to fly successively bigger planes, up to the B29. The war ended as he was flying his last training mission. Now he's with American Airlines in Chicago and Christine is busy free-lance writing, "and not doing too badly, either."

Starving in a garret once was considered an inevitable part of the artistic life. But here is the story of a group of artists and craftsmen at Scottsdale, Arizona, who have found a way to follow their dreams without sacrificing three square meals a day and a comfortable living.

Artists of Scottsdale

By CHRISTINE B. MacKENZIE

SHINY station wagons and limousines from guest ranches share parking space with western buckboards and Indian wagons from nearby reservations at Scottsdale, Arizona. Visitors stroll through the town where store fronts are faced with Ponderosa knotty pine, and rustic roofs supported by peeled pine poles extend over the sidewalk. And one of the chief attractions of this picturesque community near Phoenix is the Arizona Craftsmen building.

Tom D. Darlington, of Phoenix, designed the building when he planned establishment of an arts and crafts center in Arizona. Studios cluster around a charming little patio decorated with murals by the Navajo artist, Hoke Denetsoosie. Large windows in each studio open onto the patio so that visitors may watch silversmiths, potters, painters, woodworkers and other artists and craftsmen at their work.

In this unusual center, an unusual group of people have gathered; people who realize their happiness depends upon following the creative work of their choice, but who are unwilling to submit to the traditional pattern of an artist starving in a garret. Some came to Scottsdale because the warm dry climate was beneficial. A few are natives of Arizona. But most of these men and women were genuinely attracted by the magnificent climate and scenery. And now, not one can be torn loose from his desert moorings.

Take the Segners, for instance.

Wes Segner is as artistic a dreamer as you can find anywhere, but he's a businessman, too. Years ago, he chose arts and crafts as his vocation but decided at the same time that it must provide him with a good living.

You'll find him in his own shop, called the Seg-Art Studio, in the



Setting Arizona stones in well-designed silver mounts keeps Wes Segner busy the year around at his work bench.

Craftsmen building where he sits at his bench designing and making jewelry and art pieces in silver and gold. His wife, Joyce, specializes in hand blocked linens, guest towels, mat sets, cocktail napkins, stenciled blouses, vanity sets and the like. Her interest in textile printing started as a hobby during the war to help fill the time when her husband was on duty with the navy, where he headed a unit of men who produced rubber invasion maps, those third dimensional terrain models used by our armed forces.

Wes and his wife are typical of the artists in this community. A hard-working pair, they settled here after the war and are making their way from scratch. They hail from Ohio, where Wesley took his degrees in art and architecture at Western Reserve university and the Cleveland School of

Art. He taught art for awhile, first at the Cleveland Museum of Art and later at Shaker Heights high school.

Joyce graduated from Hiram college and took her graduate work as a librarian from Western Reserve university. She worked as a school librarian for awhile but eventually became custodian of the Cleveland Art Museum.

They made their first visit to Arizona during the early war years while Wes was an assistant engineer at the Goodyear Aircraft plant at Litchfield Park. During his hitch in the navy, they began to think about where to settle permanently. They wanted to be productive artists, but didn't want to starve while they got started. Somehow they obtained the book called, *Five Acres and a Living*. Here they found their blueprint, adding their own



Sometimes the artists of the colony take time out from their jobs for a desert picnic in some picturesque arroyo near Scottsdale.

provision that their five acres had to be in a place like Arizona, where Joyce wouldn't suffer annually from hay fever. More important still, Arizona is tourist country with a market for their creations.

So now they have five acres of lush irrigated land, with a two-room adobe home on it which they have built mostly themselves. It's the nucleus of a larger dream house they'll have some day. Meantime it's comfortable and convenient. Most of their living comes right off the land: a vegetable garden, chickens to provide eggs and for eating, beef and pork fattened on the bountiful alfalfa crop they cut five times a year.

The Seg-Art Studio is a popular place with celebrities who winter in resorts and hotels dotted around the Valley of the Sun. They buy the silver work and leave orders for more, to be filled during the slower summer months. Segner's chief aim is to further the cause of good, simple, modern design, in which the main interest lies in shape, form and line rather than in heavy ornamentation. He uses native Arizona stones, chrysocolla, jasper, carnelian agate, and shattuckite, and mounts them in modern settings, rather than duplicating the Indian silver jewelry so common in the curio shops.

During the summer season, the Segners can take time to give private art and crafts lessons to students. Wes also has been designing a number of the small homes which are building in this expanding community. An enthusiastic promoter of the desert town, Wes found himself president of the chamber of commerce shortly after his arrival in Scottsdale. His dream was that it should be developed into a typical Western town where winter visitors could catch the flavor of frontier

days; and secondly, that it should become a real art center. He is succeeding on both counts.

As visitors wander in and out of the fascinating shops, they usually pay a visit to the Segners' neighbors in the Craftsmen building. It is a leather shop operated by Lloyd Henry New and his charming wife, Betty. Piles of brilliantly colored, richly pungent leathers lie on tables ready to be cut into the exquisite soft leather hand bags which Lloyd designs.

Lloyd, whose trade name is Lloyd Kiva, is an Oklahoman, half Scotch-Irish and half Cherokee Indian. While studying at the Art Institute in Chicago, and later while teaching at the Phoenix Indian school, he learned that although many Indians are exceptionally skilled craftsmen and fine artists, they often can find no market for their talents and products.

He developed the theory that Indian arts and crafts could be acceptably fitted into modern living by shunting off some of the traditional shapes, taboos and religious symbols. The Kiva leather shop was designed as a laboratory to try his theory. His lovely bags, often individually designed to match some patron's favorite costume, have a distinct Western look but most of them are bought by easterners who have vacationed in the Valley of the Sun. They're nationally known, having been featured in fashion layouts in *Harper's Bazaar*, *Holiday*, and the *New Yorker*.

Lloyd and Betty feel they have more than proved his theory for the business keeps them and three Indian craftsmen who work for them, busy full time. Betty spent the war years as a stenographer while Lloyd served in the navy. In addition to working on the bags, she acts as bookkeeper and business

manager of the shop. Spare moments, she runs their home, bought in one of the new areas of Scottsdale.

This year, the Kivas branched out. Lloyd brought back from Oklahoma, bolts of lovely soft woollens, handwoven by the Indians of his native state. For customers who wish it, he will design coats and jackets suitable to the materials and have them specially tailored.

One of the most convincing examples of his efforts to fit Indian crafts to modern life was the exhibit which he arranged at the Arizona state fair, last year. Lloyd, superintendent of the fair's Indian exhibit for two seasons, planned a new attraction in addition to the usual displays of baskets, silver and rugs.

He persuaded a furniture store in Phoenix to furnish a complete room with modern pieces. Then, in and around the modern furniture, he fitted Indian craft articles, rugs, handwoven drapes, silver for the buffet table, wastebaskets of leather, paintings and sculptured pieces. Standing just outside the room was a beautiful mannequin dressed in a black Adrian suit, wearing an Indian silver necklace and bracelet and carrying a Kiva hand bag.

Lew E. and Mathilde Schaefer Davis have their own ceramics shop, called Desert Kilns. They're both well-known artists, Lew as a painter, and his wife as a sculptor. But their shop spe-

Lloyd "Kiva" shows his wife, Betty, the latest of his originally designed handbags, with a matching pair of Indian made gloves. She has just finished a white bag.



cializes in ceramic pieces, some sold at retail, some wholesale, and some as custom orders.

Arizona-born, Lew took his art training in New York but returned to the west to live. He met his wife, a New Yorker by birth, in Phoenix. They built their first home, a large adobe, with two studios so each might have a place to work.

His paintings have been exhibited in galleries all over the country and his murals decorate many public buildings. He is represented in the permanent collections of the International Business Machines Corp., the Newark Museum, the Pasadena Art Institute and the Edward Bruce Memorial Collection. Mrs. Davis' record is equally distinguished. She studied architectural and portrait sculpture both here and abroad and her pieces have been widely shown. She's listed in the Who's Who in American Art.

People who know the Davis' reputations as artists sometimes wonder why they run as mundane and commercial a business as the Desert Kilns. But the couple has an answer in addition to the usual one of earning a living. They believe most of the John and Jane Does in this country would develop true appreciation of arts and crafts, if only they could afford it. Therefore, the Davises are making available well designed and artistic pieces in one medium that the public can afford. Visitors to their studio can follow the

Chuck O'Connor can paint gorgeous scenery from his own front yard. His wife, Ruth, is nearby to cheer him on.



One of the carved spandrel decorations done by Raymond Phillips Sanderson for the S.S. President Monroe is called "Coiling Rope." It is one of a series of six murals "Six Elements of the Sea" and is done in Tabasco mahogany and Primavera wood from Guatemala.

whole process of ceramics through molding, glazing, and baking.

The Craftsmen building also houses Mat's Rock Shop, a haven for rock hounds; a gift shop operated by Peggy and Horace Smith; a woodcraft shop run by a young veteran named William Burnham; and an art gallery, branch of a larger gallery at Camelback Center, another of Tom Darlington's projects. The gallery features the works of such painters as Paul Sample, Edward Gassner, Goultry and Whorf.

There are many artists and craftsmen in Scottsdale besides those at the Craftsmen Center. And this is the country which Frank Lloyd Wright, father of modern architecture, chose as the site of his school, Taliesin West. His students spend their winters in a modern western style building, nestled on the side of one of the nearby mountains.

One of the pioneer artists in the neighborhood, Miss Marjorie H. Thomas, is a sprightly woman who lives by herself in the house which she helped build in 1909 when she, her invalid brother, and their mother came to Arizona from Boston, Massachusetts.

She found her Boston art school training of little assistance in trying to reproduce the warm colors of Paradise valley's blinding sunlight. Miss Thomas spent hours on the desert, just trying to reproduce one sagebrush in color. And there she learned the secret of the beautifully accurate desert painting she now does.

Her life is devoted to the purpose of putting on canvas her love for horses.

She takes portrait commissions of horses and other animals, placing their figures against extremely simple desert backgrounds, so that the animals stand out in bold relief. She makes a snapshot of the subject, or a pencil or watercolor sketch, while in the field. Then, back home in Scottsdale, she develops her painting, usually in oil.

Then there's Bob Petley, a young man from Akron, Ohio, whose future as a cartoonist was being rapidly ruined by arthritis in his right hand. Three months of Arizona sunshine cured him and he was soon drawing again for the Phoenix Gazette. That same sunshine and a drawing of a comical little rabbit which appeared one day on his drawing board were the start of a career for him. He drew up a set of cartoon postcards in which the rabbit is one of the chief characters and started selling them to dealers in his spare time.

Now his business is a full time job. With the cartoon cards, he distributes his own designed souvenir stickers, beautiful post cards made from Kodachromes of desert subjects, and stationery with desert motifs and drawings. And his territory is from California to Texas, with Scottsdale as the hub.

Another craftsman in an unusual field is Raymond Phillips Sanderson, who teaches art at Arizona State college at Tempe. He and his family have an apartment at the rear of the Craftsmen building in Scottsdale, and he serves as the building superintendent.

Somehow, in addition, he finds time



to produce amazing wood sculptures and murals. A few years ago he submitted three sets of designs for a national competition open to all American artists for decorations to adorn vessels of the President lines. All three were accepted. These fascinating murals can now be found aboard the SS President Monroe, the SS President Garfield and the SS President Van Buren.

That old bogey sinus trouble brought Artist Charles J. O'Connor to Arizona. He hails from Carson City, Michigan, and holds an art degree from Notre Dame university. O'Connor spent a year studying with Oliver Kemp, the artist who did many covers for the Saturday Evening Post. When Mr. Kemp died, O'Connor took over the studio, specializing in portraiture and murals. Wanderlust and his stuffy sinuses started him on the way to Taos, New Mexico, where he joined an artist colony for awhile. Then he served a spell as a camouflage instructor with the A.A.F. in California.



A saucy rabbit appears on all of Bob Petley's cartoon cards. Here's Bob at his drawing board, sketching the original bunny.

Later, while he was working at Paramount studios in Hollywood, someone convinced him that the high altitude of Mexico City would cure his troubles. But he never made it. Phoenix claimed him on the way and that's where he stayed. Here he met his future wife, Ruth, and after a Christmas Eve marriage, they settled in the city, opening an art studio and teaching classes.

Chuck and Ruth both love the wide open spaces, and it wasn't long before they settled on a 40-acre ranch near Scottsdale, building their own adobe home and developing the land. They rent out part of their land, and keep a portion for their own use. Chuck can paint whenever he wishes, for there's

plenty of gorgeous scenery from their own front window. He takes portrait commissions, but makes sure that they don't interfere with summer plans.

That's when they pack a few belongings into the car and head northward toward Colorado, taking their time about it. They paint and fish as they go, and sell pictures when the occasion offers. And though O'Connor paintings have been exhibited in cities across the nation, they still head home to Scottsdale each fall.

Jepson and Ann Lonquist are another pair of nomads. They should really be called a threesome, as their two-year-old son, J. J., travels with them. This little family started down the west coast from Portland, Oregon, with a trailer, moving around the country, getting experience and painting as they went. Winter last year brought them to Arizona where they

soon gravitated to the artists' colony at Scottsdale.

Originally from Montana, the Lonquists are ardent Arizonans now. They expect to park their trailer in Scottsdale every winter from now on.

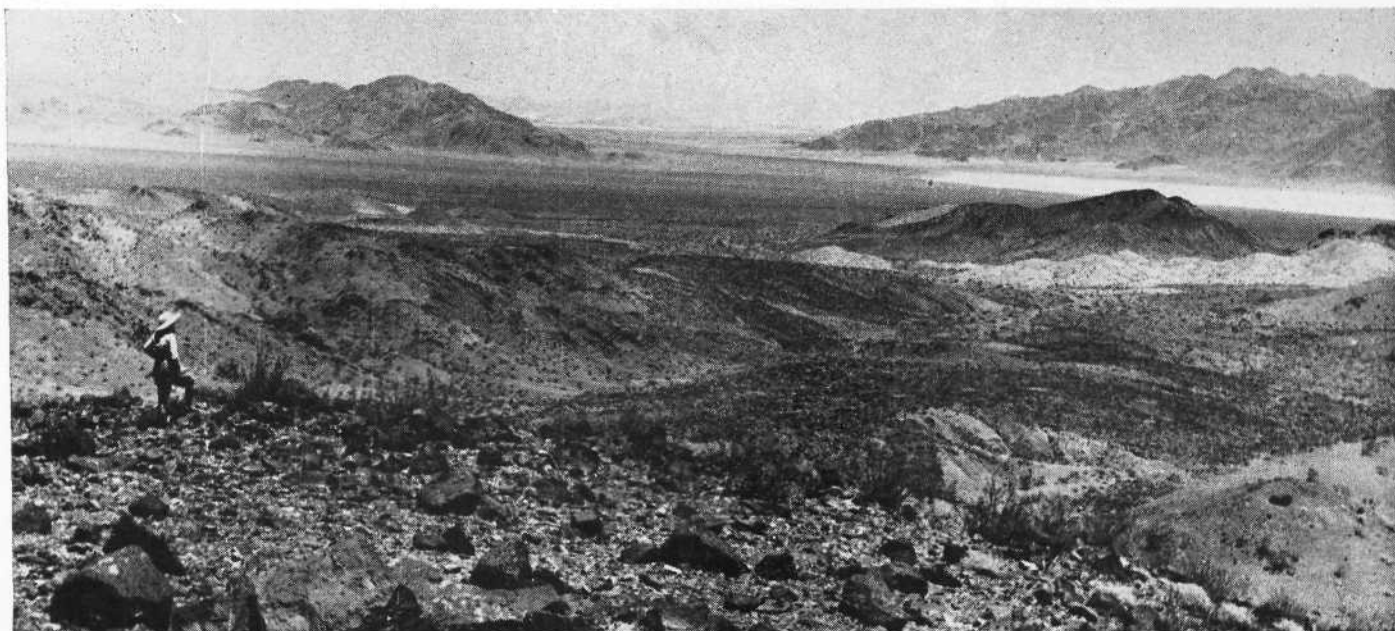
Jepson, known as Jeep, sells pictures whenever he can, of course, but he also has a sideline or two. Last year, the Segners handled Jeep's "a note to tellya" cards which are hand-painted originals in either abstract modern or western themes, combined with a bit of notepaper in a special envelope.

So the artist colony in Scottsdale increases and the craftsmen who are already there find their circle of congenial friends easy to widen. They have a great deal in common. They all love their arts and crafts, and they all love their picturesque desert with its warm, ever-comforting sunshine.

TRUE OR FALSE

Very few people have a broad enough knowledge of the desert to score 100 per cent in this quiz. But those who are following this column month after month eventually will acquire a broad field of information on many subjects. The test includes history, botany, geography, mineralogy and general lore of the Southwest—but your good common sense will also help a lot. Grade yourself 5 points for each correct answer. Any score above 50 is above average. Twelve to 15 is good, 15 to 18 excellent. Over 18 is super. Answers are on page 38.

- 1—Billy the Kid was a noted outlaw in Utah. True..... False.....
- 2—Desert birds sometimes build their nests among the thorns of Cholla Cactus. True..... False.....
- 3—The Mojave river is a tributary of the Colorado river. True..... False.....
- 4—Jacob Hamblin was the leader of the famous Mormon battalion. True..... False.....
- 5—Desert drivers should carry chains to put on their wheels when driving in heavy sand. True..... False.....
- 6—Ocotillo is a member of the cactus family. True..... False.....
- 7—Only poisonous lizard found on the Great American Desert is the Gila Monster. True..... False.....
- 8—The book "Death Valley in '49" was written by William Lewis Manly. True..... False.....
- 9—Butterfield stage stations were welcome havens for the gold-seekers who came to California in 1849. True..... False.....
- 10—One of the lead ores is named Galena. True..... False.....
- 11—The traditional manner for divorcing a husband in the Hopi tribe is to put his belongings outside the door. True..... False.....
- 12—Screwbean mesquite gets its name from the gnarled form of its trunk. True..... False.....
- 13—The Great Salt Lake is a larger body of water than Lake Mead. True..... False.....
- 14—The capital of New Mexico is at Santa Fe. True..... False.....
- 15—Tallest of the native cacti growing in Arizona is the Organ Pipe cactus. True..... False.....
- 16—The temperature on the floor of the Great American Desert never drops to the freezing point in winter. True..... False.....
- 17—The Mexican border at El Paso, Texas, is farther south than the border at Nogales, Arizona. True..... False.....
- 18—Davis dam, now under construction in the Colorado river is upstream from Needles, California. True..... False.....
- 19—The town of Winnemucca, Nevada, was named after a famous Navajo Indian chief. True..... False.....
- 20—The University of Arizona is located at Tucson. True..... False.....



From the hill above the field, a vast stretch of the Mojave is visible. The Cadys are in the foreground and to the left, the Bristol mountains, right. The Tonopah & Tidewater railroad once ran through Broadwell dry lake, right.

Rock Trek in the Colorful Cadys

When Mary Beal and Harold Weight went rockhun'ing into the Cady mountains, east of Barstow, they found agate which will please the collector. And—since Mary is a botanist first and a rockhound second—there were other interesting things along the trail. Here is a report on an area which will prove increasingly popular with the rockhounds and the story of a woman who has labored ceaselessly to perfect her knowledge of the desert flowers.

By HAROLD O. WEIGHT

IF you should come upon a small active woman in some isolated corner of the Mojave, wrapped about with photographic equipment and clinging to the canyon wall with fingers and toes while she decides whether to study a flower or investigate a mineral specimen, it will be quite safe to say: "Hello, Mary Beal."

Of course if it is Mary Beal on one of her botanizing expeditions, the flower probably will get the preference, for she is a recognized authority on the flora of the desert. She knows flowers because she loves them.

She also is interested in rocks and was hunting specimens in the Calico mountains more than 30 years ago when one used a horse and buggy to visit the ghost mining camp. Rocks are piled all over the place at her small

cabin on the Dix Van Dyke ranch near Daggett.

Mary had not been forewarned early last June when I drove from the bright Mojave glare into her tree-shadowed oasis to suggest a field trip to the Cady mountains. But she nodded and said, "When do we start?" And we started. Nominally we were after rocks, but Mary feels that any excuse for a trip into the desert outlands is valid, and rockhunting and botanizing fit nicely together.

The Cadys lie about 40 miles east of Daggett—an oddly shaped series of mountains, buttes and valleys which stretch across most of the 25 miles between highways 66 and 91, northwest of Ludlow. They take their name from old Camp Cady, which was established in April, 1860, on the Mojave river at the northwestern tip of the

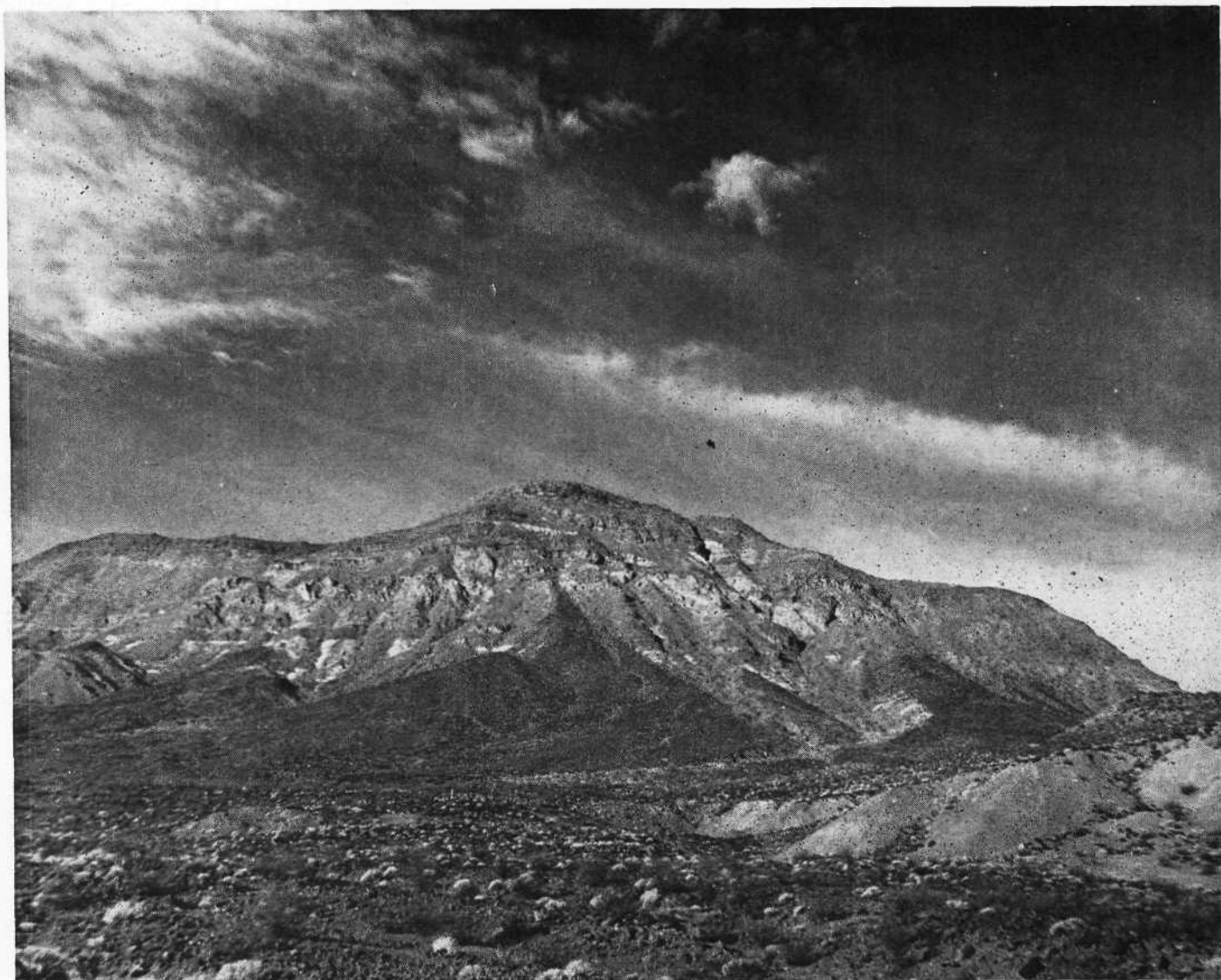
range. Major James H. Carleton probably picked the spot because springs seep from the cliff there. The camp was maintained for protection against Indians who raided the Salt Lake or Old Spanish trail and was abandoned in 1866.

Little geological information has been published about the Cadys. During the two world wars some manganese, barite and celestine were mined along the southern slopes of the range, and there are active claims in that vicinity. It was this southeastern section, composed largely of Tertiary lavas, that we planned to investigate. Many beautiful rock specimens have come from the area, which lies close to Highway 66 and the old road between Ludlow and Crucero. I had hunted in the buttes nearest that dirt road before, and had found excellent material, but not in sufficient quantity to justify a mapped field trip.

It was hot when we reached Ludlow, a railroad town which once was the southern terminus of the Tonopah and Tidewater line. Oleanders bloomed along the streets, but there was little greenery about the town and signs in the service stations warned: "Do not waste water."

Mary explained: "Water has always been a problem here. Every drop used for any purpose has to be hauled in."

There is water under Ludlow—but it is a long way down. When the railroad, then owned by the Southern Pacific, was completed in 1883 a well was drilled to 1600 feet. The drillers struck water at 785 feet and again at 1084 feet. The water was fairly good for boiler or domestic use, according



At the end of the trail one looks ahead to a beautifully banded peak of the Cadys.

to David G. Thompson in his monumental water supply paper, *The Mojave Desert Region*, published by the U. S. geological survey. But either the yield was insufficient or it was considered uneconomical to pump from such depth. The well was never used and water was hauled by tank car from Newberry springs.

We zeroed the speedometer at Ludlow and left the pavement, taking the bladed road which leads almost due north through Broadwell valley, which separates the Cady and Bristol mountains. At 1.6 miles, we crossed the roadbed of the abandoned Tonopah and Tidewater railroad. Borax Smith built this \$3,000,000 narrow-gauge across the blazing Mojave in 1907, to tap his great Lila C. borax mine on the edge of Death Valley. Smith had planned to run a spur from the railroad Senator Clark was constructing from Las Vegas, but when terms could not be arranged, Smith built his own

line from the Santa Fe at Ludlow to Beatty. It was a struggle to keep sufficient men on the job through the summer heat, but C. M. Rasor staked the right of way and John Ryan drove the project through.

Today only the roadbed and a few ties, too rotted to salvage, show where borax-loaded trains once puffed their way through now silent desert mountains. This section of the narrow-gauge was the first to become superfluous when the Salt Lake railroad—now the Union Pacific—crossed the Tonopah and Tidewater at Crucero and shortened the Death Valley haul by 25 miles.

We reached the edge of Broadwell—sometimes called Ludlow—dry lake at 5.8 miles. Here the road divides, the dry weather route crossing directly through the playa, the wet weather trail angling to the left to keep above the dry lake. We followed the wet weather road to 7.4 miles where an auto trail took off left, into the great sloping

bajada which cuts to the heart of the Cadys. These were the sort of tracks which are made only by rockhounds or prospectors and when they headed back southwest toward the red and green volcanic buttes and peaks I hoped to explore, we followed them.

The road was typical of the more primitive type. It twisted and wriggled to avoid rocks and bushes, bounced in and out of drainage ruts and curved up sandy wastes. Near the southeastern end of the Cadys, it entered a broad barranca and headed in the general direction of a large, strikingly banded mountain. The foothills which we were approaching showed strong contrasts of reds, greens and whites. At 10.5 miles, a faint branch headed right, but we followed the main trace up the wash.

We were passing through the typical desert vegetation of the region. There were healthy-looking catsclaws with well-developed seed pots, their green leaves the brightest things in sight.

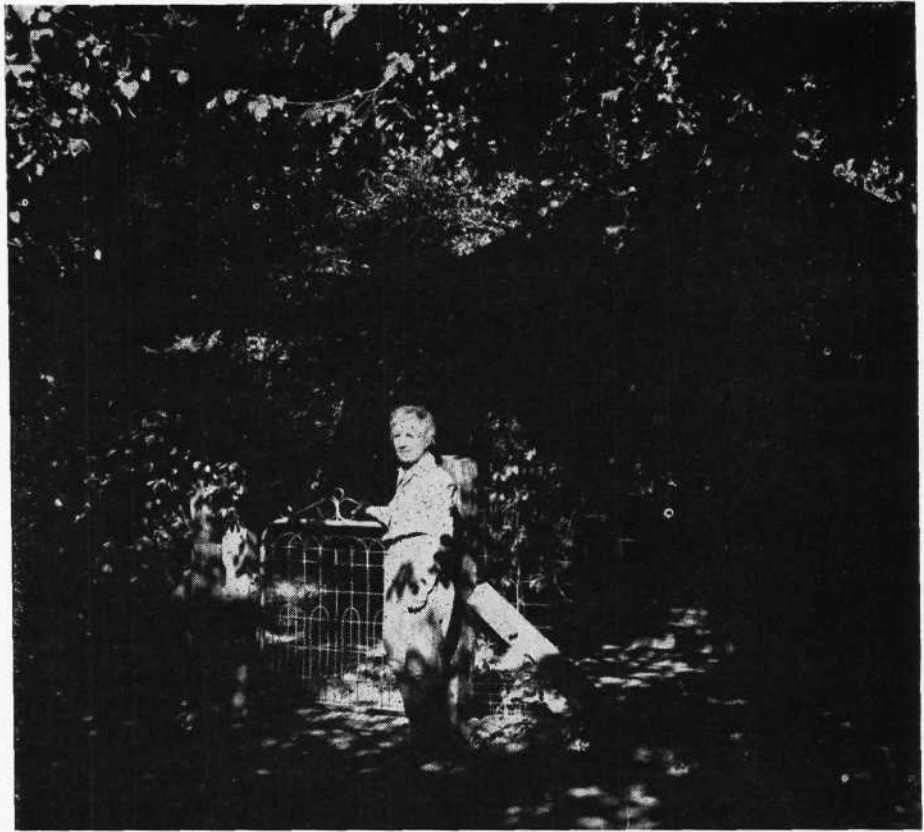
Burrowweed, desert holly and creosote bush were plentiful and we came upon increasing numbers of grey and ragged smoke trees. On my way up to Daggett, the great smoke trees in the washes along the Salton and through the Coachella valley were crowded with rich blue blooms. But there seemed neither buds nor flowers on these in the Cadys. The blooming period varies greatly, Mary explained, according to altitude and location.

Then, close beside the sandy auto trail, we saw a large crucifixion thorn bush, its branchlets thick with clusters of nut-like fruits. This called for photographs, and while we set up our equipment, Mary told me that the plant—*Holacantha emoryi* Gray, a member of the Ailanthus family—has flowers of separate sexes. The stamens grow on one plant, the pistils on another. *Holacantha* is from the Greek and can be translated as meaning wholly a thorn—which is an excellent description of the plant, as anyone who has been punctured by the hard sharp points of the stiff branches will testify.

According to some authorities the crucifixion is a plant of southern Arizona and northern Sonora which has spread to the hot deserts of eastern California. It is found occasionally on dry plains and in washes on the southern Mojave near Daggett, Ludlow, Amboy and Goffs, and in portions of the Colorado desert. The crucifixion thorn is grey-green. Its leaves have been reduced to scales, and the yellow flowers appear in May. The fruit, reportedly, is popular with burros and goats if they can reach it without having to take the thorny branches.

Mary Beal knew nothing about the desert plants when she first came to the Mojave. In fact, her arrival on the desert was not through choice. Working in the library at Riverside from 1906 to 1910, she met the writer-naturalist John Burroughs and a friendship grew between them. She was invited to visit the Burroughs home on the Hudson while on a projected eastern trip during the summer of 1910.

Before the trip was made, Mary was stricken with pneumonia. She wrote to Burroughs, telling him of her struggle to regain health, and he asked her to write to his friend, John Muir. Muir's married daughter lived on a ranch in the desert and Burroughs thought Mary might find refuge there. Muir was sympathetic and in time Helen Muir Funk, who had gone to Daggett under similar circumstances, told Mary to come out. A woman on the ranch could take care of her washing and feed her, but she must bring her own tent to live in.

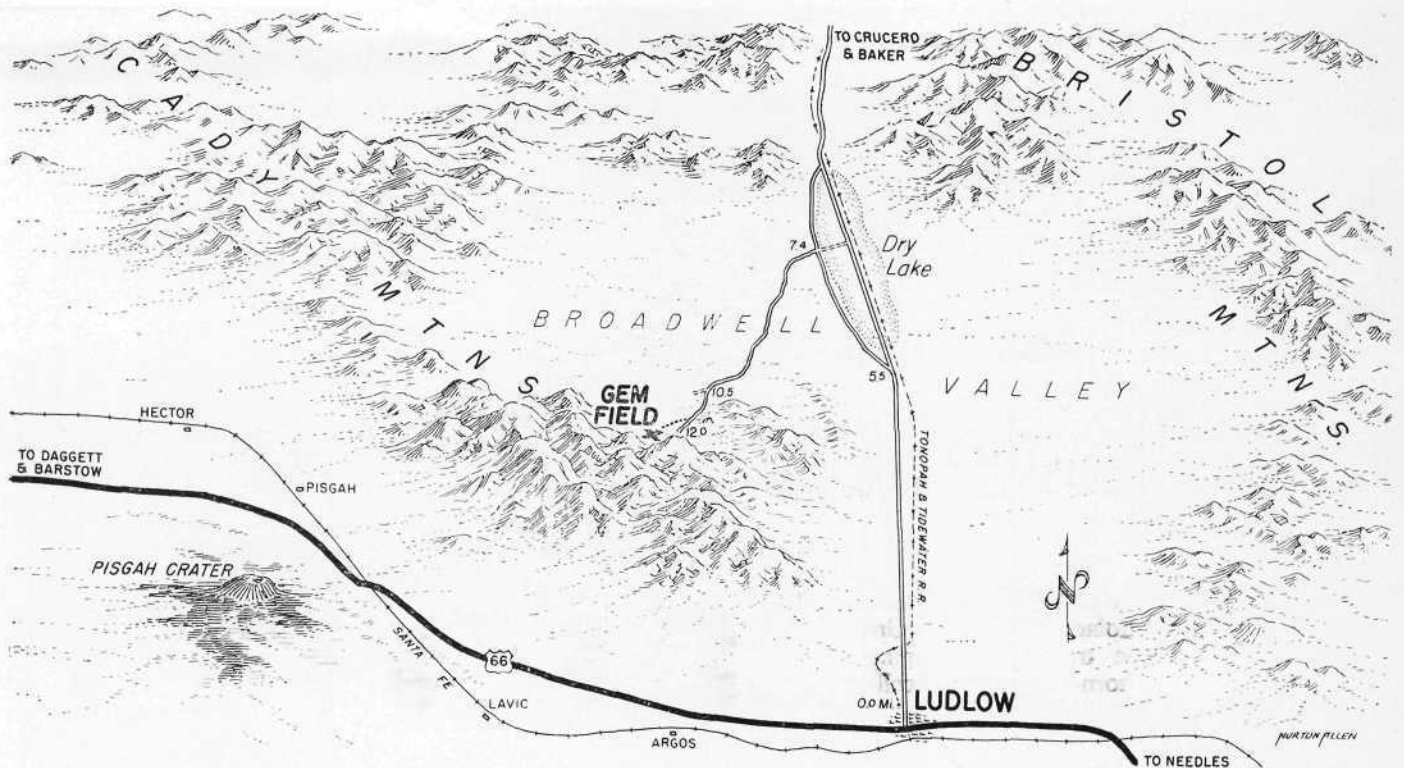


Above—When Mary Beal first lived on this site on the Mojave in 1910 there was but one tree near her tent. Today she has a comfortable desert home in a jungle of shrubbery.

Below—Miss Beal takes time out of her rock hunting trip into the Cadys to photograph the pods of a desert milkweed.

A friend obtained the tent and it was set up, with wooden floor and side-walls, right where Mary Beal's little

home stands today. Mary had been warned that the desert was terrible, but her doctor told her she must stay



a year and a half. She came to Daggett determined that she would not be licked by the desolation.

It was a stunning change for one used to cities and softer lands. All trains stopped in Daggett in those days, even the fast train of its day, the California Limited. Mary's friends would let her know when they were traveling. And when she drove in to see them for the short stop, they would have flowers for her and would sympathize with her. But Mary, who had come to the desert only to exist for a year and a half, found that she did not need their sympathy. "They called it a God-forsaken place," she said, "but I came to love it."

And when her period of exile was over and she went back to the doctor he told her: "You can live anywhere in the world you want to now. But I think you will be healthier and live longer if you go back to the desert."

And, strangely enough, Mary found the advice was not hard to take. She went back to the desert—and she went back to stay. The floor of her living room today is the same wooden floor that once was in her tent house. But wooden walls and roof have replaced the canvas. Rooms were added as her belongings and interests increased. Electric lights, refrigeration and piped water have made the mechanics of life easier.

But the greatest change has come through the veritable jungle of trees and shrubs, orchards and vines which have grown up about her home and on the Van Dyke ranch. Mary has pictures of the tent house and its development. When she first came there

was one tree near, and she could see the mountains in all directions. "You know the desert mountains," she said. "They have a color and personality all their own—which is hidden by heavy vegetation on other mountains." But today Mary must walk to the edge of the ranch before she can see any of the ranges she knows so well.

Mary kept up her acquaintance with John Burroughs. Once, in 1912, she drove him by buggy to Calico. He was fascinated by the broad geological strokes with which Nature had drawn those colorful mountains. When Mary saw him just before he died he remembered the trip. "I've always want-

ed to get back to the Calicos," he said. "Now I guess I never will."

John Muir came to the ranch, and of course T. S. Van Dyke was there. John C. Van Dyke, who wrote that classic of the arid lands, *The Desert*, was a visitor. These men, who loved and expounded the wonders of Nature, whetted Mary's interest in the desert about her. And the wildflowers that bloomed in profusion on all sides re-awakened her interest in botany. But there were so many flowers she could not identify—many she could not even find listed.

What she considers her greatest help—Willis Linn Jepson's *Flowering Plants of California*—was published in the early twenties. Then Mary really went to work. Many a night she spent with botany manual, dictionary, and the flower she was trying to identify. Her only formal botanical training was the high school botany course to which most of us have been exposed. So the dictionary was necessary to translate botanical terms so she would know what the description meant and what to look for.

"But those terms are necessary," she said. "They concentrate the meaning of an entire sentence in a single word."

Mary literally wore out some of her manuals in becoming an authority on desert flowers. As time went on she received the active help of Dr. Jepson in her work. During the flowering seasons, the University of California professor spent days and weeks in the vicinity of Daggett. Mary went on many all day trips, collecting and observing plants with him. And from

ROAD LOG

- 00.0 Ludlow, located on Highway 66, 43.3 miles east of Daggett. Leave Highway 66 at Ludlow and head north toward dry lake.
- 5.8 Road enters dry lake bed. Wet weather road branches west (Left). Follow wet weather road.
- 7.4 Turn west south west (left) on rockhound road leaving wet weather road. Keep left on this winding road.
- 10.5 Faint branch right. Keep left.
- 11.8 Road branch. Left branch goes 100 feet to camp site. Right branch goes .2 mile to base of hill. Bad, twisty road. To reach rock field, take wash, right, which reaches road at approx. 11.8 miles and follow it approx. .5 mile, keeping to right of low range of green hills. Go through narrow, reddish cut and up a drainage channel cutting down from hills, left.

these sessions she received encouragement to continue her studies alone.

Mary has made hundreds of flower portraits, and today she uses three cameras in her work: a Korona view, an Eastman 3A and a little Zeiss. Most of the closeups are done with the Korona, which once belonged to a Mount Wilson astronomer who used it to photograph Halley's comet. Now it is focused on the flower stars of the wild desert gardens. She makes many pictures in the field, exercising painstaking care to show plants and flowers in their natural setting. But most of her beautiful flower portraits are taken indoors, using the blooms she brings back from desert mountains, valleys and mesas.

She makes the closeups with the natural sunlight which falls into the room. Exposures, with small iris openings and fast film, are around 30 seconds. She has hand colored many of the flower pictures, and lately has been branching into color photography with the Zeiss.

After we had photographed the crucifixion thorn and its fruit, we resumed our trek up the winding desert trail into the Cadys. At 11.5 miles, another wash opened to the left and jeep tracks indicated that someone had been investigating what looked to be excellent rock country. But the main road continued right and at 11.8 miles divided. The left branch went perhaps 100 feet to a much used camp site. The right branch ended at the base of a barren greenish ridge after about .2 of a mile of twists and bumps. There had been a number of camps at the ridge, but the last little stretch is the worst of the entire road and is not advised for any low-slung car.

We halted at the lower camp. Any doubt that we had followed a rock-hound road was dissipated when we climbed out of the car. In the wash and on surrounding flats were numerous bits and chunks of agate, chalcedony and moss. The many broken pieces showed the area had been well-hunted, but good rocks still could be found.

The topography of this section of the Cadys is rugged and treacherous—with steep pitches, crumbly rock and an overlay of insecure volcanic boulders. But it is spectacular and vividly colored and some of the sweeping views into the infinity of the Mojave approach the sublime. Throughout much of the day, while a breeze tempered the summer heat, we climbed over ridges and through canyons. Cutting material was found in many spots—usually in limited amounts. Since the same formations continue for miles,

there unquestionably is a great deal of fine agate and chalcedony waiting for the person who is willing to expend time and energy to find it.

The best locality we visited lies about half a mile beyond and to the southwest of the camp site, along the green ridge against which the road ends. The best route lies up a wash which cuts off right just below the road Y mentioned at 11.8 miles. I discovered that while this wash probably can be navigated for some distance by a short wheelbase jeep, it spells trouble for a

longer car. After a successful .2 of a mile, clambering over bushes and geeing and hawing at some of the twists, I attempted to ride over an innocent appearing burroweed. I found the bush had a very solid rock center. I was stalled with a boulder too large to be moved thrusting up between my front wheel drive and oil pan.

It was a situation which might have led to a long hike under the summer sun. But I had two old Ford running boards along. So I jacked up first one front wheel and then the other, build-



The chuckawalla whose curiosity permitted him to be captured poses reluctantly in Mary Beal's hands.



Closeup of the thorns and fruit of the Crucifixion plant.

ing a ramp of stone under each. When the ramps were high enough so the front drive would clear the boulder, I placed the running boards as paving on each ramp, under the wheels, and rolled back into the clear without a rasp.

We elected to walk from that point, and a little farther on came to a ledge of red volcanic rock through which the intermittent stream had gouged a narrow channel. The red rock was seamed with calcite, and later investigation of some larger samples taken proved the calcite would fluoresce a strong reddish orange under the ultraviolet lamp.

Beyond the red ledge, the canyon swung sharply left, and a V-shaped drainage channel could be seen cutting down from the ridge on the left. On the slope this channel cuts, and at the head of the channel, is a regular silica "blowout," with agate and chalcedony of almost all grades, from good to bad, plentiful. We found moss of varied colors, small crystal-lined vugs, fortification agate and small amounts of exquisite material which could be classified as plume.

When we had filled our collecting sacks, Mary and I climbed to the top of the little hill and sat on blackened volcanic rocks to rest and absorb the mammoth canvas of the Mojave spread out below. A plump chuckawalla clambered over the edge of the rise. Seeing us, he changed direction and—showing no fear—headed directly toward us. Perhaps a dozen feet away he halted and surveyed us with the

intense curiosity which seems a family trait with this lizard. When I moved toward him, he edged into a crevice under a small rock and peered out.

I reached under the rock and took a firm grip on his hide, feeling him puff with air until his loose outer skin was inflated and wedged against the rock. It was impossible to pull him from his refuge until I violated the rules of the game by tipping the rock up, and held him blinking in my hand. He struggled to escape—and his claws were sharp—until a gentle rubbing on the head assured him that my intentions were not unfriendly. Then he relaxed and seemed to enjoy the massage. I transferred him to Mary Beal's hands where, after another period of unrest, he submitted with noticeable lack of enthusiasm to having his picture taken.

I have always considered chuckawallas as slow moving. But when we released this fellow, the speed with which he reached the edge of the hill would have been creditable in a sprinter. At the brink he paused to look back at us, seemed to shake his head doubtfully, then vanished.

We settled back to stare out across the desert—the vast, mountain-strewn Mojave. The Cadys were spread out, and the Bristol mountains, and Broadwell valley and the dry lake. And one could look into the north, along the route of the vanished Tonopah and Tidewater, to Soda Lake mountains and the sandy Devil's Playground. Beyond them even, to the shadowy

Kingston range, wavering and dancing in the heat haze.

In all that emptiness we could see nothing that moved. Even the thread of road we had followed into the hills was hidden. With the chuckawalla gone, we seemed utterly alone—and yet there was no loneliness. There is a vast, all-encompassing difference between loneliness and solitude. That is what Mary Beal's friends did not understand. No one who has felt the living peace of the desert can call it "God-forsaken."

PINYON CROP REPORTED POOR IN NORTHERN ARIZONA

The pinyon crop this fall in Coconino national forest is rated from poor to fair in the annual forecast by forest rangers. The last bumper crop, according to Coconino Forest Supervisor Roland Rotty, was in 1940. In that year Hopi and Navajo Indians are estimated to have collected over one million pounds of the nuts.

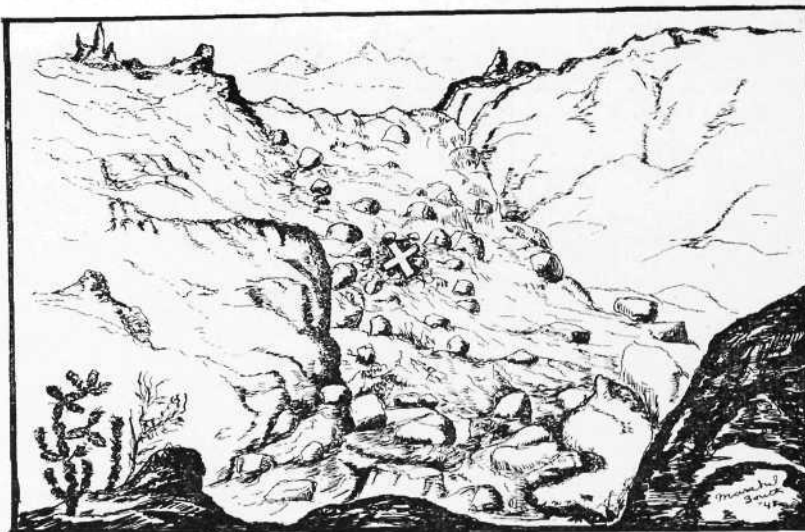
The pinyon tree is said to be an erratic producer of nuts. The cone of the pinyon requires two years to develop, and a given area seldom produces crops in successive years. Often there is a lapse of several years between crops of sufficient size to make collecting pay. When ripe, the cones open and the nuts, seldom over half an inch long, fall to the ground. Data on the crop is gathered in each ranger district and forwarded to the Southwest Forest and Range Experiment station at Tucson. —*Coconino Sun*.

A large percentage of the rock at the silica "blowout" is banded and moss agate.



This story from Marshal South came to the Desert Magazine editorial desk in late summer and was in the composing room awaiting publication when word came on October 23 that the author had died the previous evening. Marshal has been a regular contributor to Desert for more than eight years—and there are many readers who will share with our staff a deep sense of loss in his passing. He will be remembered as one who has disclosed new beauty and understanding to those of us who have followed him along the desert trails—and we are sorry, very sorry that his earthly trail has ended.

—The Editor.



Author's sketch of the site where probably the emerald mine was buried beneath millions of tons of rock.

Desert Trails

By MARSHAL SOUTH

WILL the old Indian emerald mine in the Santa Rosa mountains bordering Borrego valley ever again be re-opened and worked?

That is a question which I have asked myself many times, particularly during the last few days. Probably the answer is "NO!" But *quien sabe?* Perhaps I attach too much importance to the words of old Pablo Martinez. And anyway I have been accused of being superstitious. But you shall form your own conclusions.

This old Indian mine truly belongs to the class of lost treasure. But it is lost only because I doubt if it is within the power—or at least the profitable power—of white men to recover it. It is one of those things which Nature has taken back unto itself.

Comparatively few people, I think, have ever heard of this old gem mine. The legend is not as well known as that of the Pegleg or the Lost Arch and other will-o-the-wisps which have taken such hold upon the imagination of Southwesterners. Nevertheless the emerald mine perhaps more rightly deserved a first place than any of these. Emeralds—good emeralds—are rare. And there are comparatively few emerald mines in the world. This one—the one in the Santa Rosas—is, judging by the claims of legend, probably the only one of its kind in the United States.

The story of the old mine has always fascinated me. Perhaps because it was so very difficult to learn anything definite about it. Yet I have never had any real doubts as to its existence. Several individuals have tried to find it. And some have come very near. One who put his hands—or rather feet—closest to the location was the late Bob Campbell, old-time resident of Borrego Valley. Bob—who had a generous proportion of Indian blood in his veins—almost found the mine. On the last lap of his search, something stronger than hope of wealth deterred him. "I am afraid," he said simply. "I cannot go on. The spirits of the old people do not want this mine discovered. I must go back."

His companion protested and argued. But Bob was obdurate. He turned back. The search was abandoned. The old mine, which legend says had been worked from the earliest times by the desert Indians, who had a trade route for the gems down into Mexico and beyond, was again left in its shroud of mystery.

So, through a number of years, the thought of this mysterious Indian gem deposit has held my interest. Several times I have been on the point of setting out to hunt for it. But always something intervened. Recently, however, the opportunity came. In company with Robert Thompson, a South American mining engineer, I went in search of the mine.

We were not alone. For Thompson, who came from the southern republics several months ago on an extended vacation, had found somewhere an ancient Indian, Pablo Martinez. Pablo who was very old and hailed originally from Hermosillo, Sonora, averred that his great grandfather had been one of the workers in the emerald mine. Stories concerning it had been handed down, he stated, from father to son. Some of these stories, to which I listened, obviously were fantasy based on a slender thread of truth. But there were others that sounded convincing.

Thompson knows emeralds—the Republic of Colombia, where he operates extensively, produces many of the worthwhile emeralds of the world. Also, he knows Indian psychology. We set out on our trip with high hopes.

There wasn't anything particularly mysterious about the initial part of our trip. We wound down through Borrego valley and across Clark's dry lake. The base for our search was to be Rock House Canyon as it had been for Bob Campbell and the various others who had preceded us. We took the car as far as we could, parked it and made camp for the night. The next morning with canteens and light packs the three of us set out on foot.

Rock House canyon and the site of the Rock House deserves some mention in its own right, for it is an interesting spot with an imagination-stirring atmosphere all its own. But I cannot spare space, at this time, to devote to it. Our quest lay beyond, among the precipitous slopes and barren ridges. Without delay we struck off into the savage, upended terrain.

We were not traveling entirely blind for by diligent sifting of all the reports which I had been able to unearth, I had some idea as to where to head in. Old Pablo began from the first to justify our rosy hopes. Either he had

actually absorbed a lot of information from family legends or else he was acting under some sort of an uncanny inherited sixth sense. At any rate he seemed to know his business. He led off oddly in the manner of a man who knows just where he is going. He was astonishingly wiry despite his years—scrambling up over rocks and ledges with the agility of a mountain goat. From time to time he would pick out old Indian trail signs that neither Thompson nor I would have noticed. We began to feel curiously elated. The grip of a strange excitement mounted in us.

Nevertheless it wasn't going to be as easy as all that. As the rugged tangle of the mountain increased we began to realize this. Desert mountains are heartbreaking, especially under a hot sun. Everything was thirsty and barren and the glare hurt the eyes. Doubling up gullies and floundering across interminable ridges began to confuse us. We were tired and our nerves were getting jittery. Pablo lost his agility and began to lag well in the rear. As the day wore on he became either confused or sullenly unwilling. "A ridge with rock formation on it that looks like a castle" had been part of the vague information. But all the rocks looked like castles. The upthrust of weird boulder-shapes against the skyline was bewildering.

We made a camp at dark in a lonely depression between desolate ridges. I, for one, had the feeling that we had circled aimlessly. We were all depressed. At least Thompson and I were. Pablo said nothing.

The stars were points of yellow fire against black velvet. And the thin wind that came down from between the ridges was lone and chill. I fell asleep listening to Thompson telling a yarn about searching for an emerald mine in the Andes. I didn't hear it very well. I was disheartened.

I slept badly. It seemed to me, in my dreams, that the lonely canyons about us were peopled by a myriad of ghosts. Brown ghosts. Unfriendly ghosts. Several times I awoke in a cold sweat. Pablo was restless too. Only Thompson seemed to be sleeping soundly. He is a practical man and has little use for spirits.

We aroused to a chill and cheerless start well before sunup. We had a cold breakfast. Our enthusiasm of the day before had all evaporated.

And then, all at once, and not a hundred yards from the spot where we had camped, we came upon the Indian trail sign which marked the terminus of Bob Campbell's attempt. I recognized it at once, from what had been told me. Two big brown rocks, set one upon the other, with a smaller white stone on top. And off to one side a couple of tall boulders leaning together at the tops like an inverted V. I gave a shout of triumph that brought Thompson running. Even Pablo brightened up. His old enthusiasm returned. He began to jabber excitedly in Spanish.

After that things began to go better. It was as though we had turned some sort of corner. I don't know what it was. But I think it was principally Pablo. He had changed. He shuffled around a bit, scanning the ridges against the skyline. Then he started off at his old wild-goat lope—and in a direction totally different to that which common sense would have dictated for us. "Look now for *un cabeza del lobo*," he grunted. "Way up. On top."

But it was not on top of a ridge that we eventually found "a head of the wolf." It was way down in the bottom of a steep gully. It was a mere chance that caused Thompson to glance at the fallen rock mass. But as he did he gave a yell of excitement.

"There's your wolf head," he shouted. "Look down there! Wrong end up!"

It didn't take two looks to prove he was right. The outline of a wolf's head was unmistakable on the rugged mass, even in its upside down position and with the clutter of fallen stones that lay piled around it.

Thompson's practiced eye was sizing up the opposite slope. "Earthquake," he said briefly. "The old boy was right. It has been on the top of the ridge. But a heavy earth shock must have toppled it. And there, if I'm not badly mistaken, is your mine. Goodbye emeralds!"

He was pointing. And following his leveled finger my heart sank. An earth shock, and a heavy one, had done it, without doubt. All the slope opposite was a cascade of smashed rock and jumbled boulders. The old emerald mine, if it had been, as Pablo had averred, below the wolf's head was now hopelessly buried beneath millions of tons of rock and earth.

And as we stood there, stunned by the realization, we were aware of old Pablo, skipping and scrambling up over the fearsome slide like a malevolent billy goat. About half way up he sat down and pointed to the rocks at his feet: "*Aquí*!" he shouted down to us, "*Aquí*, señores! Here is where was *la mina*. But make not the false expectations. The emeralds are still here. But they are not for the white man. This is a curse from the old people. The mine will never be worked again except that it be by the *indios*."

There was a sort of wild, fierce triumph in his cracked voice. At that moment he looked less like a wizened old man than some spirit of his people, gloating at our disappointment. But just then we were both too dejected to pay much attention.

We spent most of the rest of that day searching the vicinity. We uncovered evidence enough that here, in all probability, had been the ancient mine. We found pottery sherds in plenty, and fire traces of old camps. In one place, where the sliding rocks had swept aside its earth covering, we found an old burial—an ancient grave. And amidst the bits of age-weathered human bone something sparkled like a bit of green glass touched with flame. Thompson pounced on it. "Emerald," he exclaimed breathlessly, "—and of first quality! Look!" He shoved it at me, along with his pocket lens.

Yes, it was an emerald all right. Small but fine. And in the hollow where the bones lay we found also bits of pale green mineral—beryl, the substance emeralds are found in. We had found the site of the lost emerald mine of the Santa Rosas. The decision was inescapable.

But much good it did us. Here was the mine—"Here," as old Pablo said, pointing downwards. But hundreds of thousands—perhaps millions—of tons of rock lay above the primitive workings. Where would come the machinery and the money to heave aside all this disheartening, monstrous overlay? And in the end, perhaps, draw only a blank. Another disappointment.

"For you never can tell about an emerald mine," Thompson said. "Emeralds go in 'pockets.' And the old timers may, after all, have worked it out. You never can tell."

Yes, you never can tell. Nor will anyone now, I think, ever tell. Well, we had the fun of finding the lost emerald mine of the Santa Rosas. But the irony of it is that it is still lost.



Desert Flower

By SARAH L. BIGELOW
Glendale, California

Now laugh, now laugh, you bold and brilliant bloom.
Though dry the air and dry the shifting sand
Your face is upward cast and staunch you stand.
Your hue would welcome be within my room
As fit as in the pattern of a loom.
If I but could your boldness always wear
No sadness then would scar this soul of mine;
Nor would despair replace the joyous wine
That is your beauty and your flashing air.
If I were only desert born and bred
Great peace would fill me though all else be gone;
Indeed, no fear, though death come with the dawn.
Laugh on, laugh on, now, desert flower, laugh!
Your dauntless life is lived, no doubt, but half.

DESERT KING

By NELL MURBARGER
Costa Mesa, California

My kingdom's a windswept mesa,
Where only the clouds go by;
There I reign over canyon and rimrock,
At peace with the earth and sky.
I can look to the far horizons
Where the tall, dark mountains be,
And the sun of the sage-grown highlands
Lays its kiss on the cheek of me . . .

Standing alone in my kingdom,
I gaze on the world below—
(A world that only we dreamers
Who climb to the mesas, know . . .)
Breathing the air, unsullied,
Clear air with the tang of wine,
I lift my eyes in thanksgiving
And ask nothing finer for mine.

I envy no king his bounty
Of glittering marble halls,
For the life that he lives isn't living,
Inside of oppressive walls!
There's a rocky trail to my kingdom,
Where the clean, white clouds go by . . .
There my throne is a creaking saddle—
My palace, the arching sky . . .

TAKE A NEW SONG, BROTHER

By GEORGE M. AMES
Coachella Valley, California

Have you heard the strumming beat
On a busy city's street
Of its people milling by, each to his chore?
As you race to catch a trolley
Have you caught the breathless folly
In the muttering of folks who jam its door?

Have you dodged the city's traffic,
Heard remarks both grave and graphic
Above the crunch of fenders, grind of gears?
And have you wondered wryly
At the mountains smiling slyly—
And the little winds' small singing in your ears?

Why not satisfy that yearning?
Change your course! Instead of turning.
Just head out where the road winds wide
and long;
Leave behind the raucous byplay,
Take the clean and quiet highway—
And say with me, "Make mine the Desert Song."

DESERT CHRISTMAS EVE

By MARIE Z. JELLIFFE
Claremont, California

Christmas comes again tonight,
And fills the desert with a light
Of one bright Star, whose inward glow
Shone on the Christ Child long ago.
Companion stars, a diadem,
Each winter flower, a Yule-tide gem.
The trees are lit with glint and spark
Of gold and red within the dark.
The sands are strung, a peerless strand,
Across our painted desert land.

ALKALIZED

By CHRISTINE FLEMING HEFFNER
Belen, New Mexico

If you begin to feel an ache
When you think of a sunset sky;
And if you begin to hunger for
The taste of alkali;
If your eyes search a flat horizon
For mountains you cannot see;
And your lungs are near to bursting
For some air that's fresh and free
If you long for the feel of a saddle,
And a coyote's howl in your ears;
And if, when you sleep, in all your dreams
Your home on the range appears;
If you're digging out your Levis
I wouldn't be surprised,
If you're heading westward pretty soon
Because you're alkalized!

THE CHUCKWALLA

By MADELEINE FOUCHAUX
Los Angeles, California
Chuckwalla, you're a queer one
In your hood of dingy black.
There are wrinkles round your middle
And loose folds across your back.
As you drape yourself on boulders
In a spineless belly-sag
You bear a marked resemblance
To the dirtiest kind of rag.
Though I never saw you do it,
I have heard that when you're fussed
You can fill those baggy wrinkles
Till you're blown up fit to bust.
If beauty has a value,
You surely took a beating.
But when you're nicely roasted
I'm told you are good eating.

A Great Soul

By TANYA SOUTH
San Diego, California
A great soul covers not in fear.
With courage flaming high,
He breasts the storm of dangers near.
And though he knows he'll die,
He'll carry on. His mind intent
On ends that must be won,
He'll see the very heavens rent,
To get his duties done.



Here is proof that the author finally got her pictures despite all the obstacles.

Saguaro Flowers Won't Pose . . .

By ETHEL S. CAPPS

EVER wonder why you don't see more pictures of Arizona's state flower, the saguaro (pronounced sah-WAH-ro)? Well, there are reasons. And very good reasons—to any photographer who doesn't possess abnormal patience, an inborn stubbornness, and the agility of a monkey.

Last spring, before I knew the reasons, I decided to do something about this picture shortage. In May, when the first patches of white began to crown the branches and tops of giant cactus plants, I went into the field to see what could be done about it.

Now, a great saguaro, full grown, stands about 50 feet high. A baby of 10 years is only a shoot above the ground. A youngster of 75, perhaps 12 feet tall, is just thinking about sprouting arms.

But around me stood a forest of grown-ups, 200 years and older, salut-

It seemed quite simple. You wanted pictures of saguaro blossoms, so you waited until the giant cactus bloomed, then went out and took your pictures. Only it didn't work out that way, Ethel Capps found. There were such things as the flower's opening and closing hours and the height of the saguaro to be considered. Even the birds and the bees took a hand in the proceedings!

ing with arms that reached 20 or more feet into the sky. On their tops, clusters of trumpet-like flowers formed white halos that were accentuated delightfully against the bright, clear blue of the desert sky.

Since sky-hooks hadn't been invented, and no balloon was available, there was left but one avenue of approach to these far away blossoms and that was by way of a ladder.

Having located one, the next step

was to find a giant cactus with arms low enough that the ladder's meager length and my height combined might make connections with the flowers.

To photograph these flowers on the plant would have required the aforementioned sky-hook or balloon. And the only solution that presented itself was to pick some, with buds to make the picture look natural, and transfer these onto a baby plant that was "down to earth." Better yet, onto the sawed-off top of a fallen larger plant.

It was mid-morning when I went up the ladder for the first batch of flowers. And bless my Aunt Susie if those blossoms—every last one of them—weren't closing up like Pat Friar closing shop after a hard day's work. Clear white petals that earlier had folded gracefully outward to form perfect trumpets were now folding as ungracefully inward until only the outer yellow-green of the tubes was visible.

Referring to a book on the subject—written by someone who knew more about giant cacti than I did—I read,

"Giant cactus flowers are nocturnal, opening in the evening and closing in mid-morning except in cool weather."

So what! I'd get the pictures next morning—early!

The next morning I was up with the sun. Up the ladder I climbed, spirited in keeping with the exhilarating morning air that precedes the blistering heat of a desert day. But, alas and woe! The petals of my posies were full of holes!

The air about me was filled with the buzz of busy bees. Birds chirped and sang as they flitted about, rushing from one saguaro to another. And then, I saw what had happened to the flowers that were to have made my pictures that day.

Bees and other insects were burrowing into the trumpets of saguaro flowers to gather honey that was so plentiful there. Birds sat on the edges of the trumpets to pick the insects off as they came out and, in doing so, picked holes into the petals. Even as I stood there, a quail alighted on a branch overhead and wholeheartedly partook of a breakfast of insects.

The following morning I was in the field at daybreak. I arrived with the birds and the bees. But complications weren't ended. I found it necessary to get the flowers home without delay, arrange them on the prop and take the pictures before the petals began to close with the desert heat. By the middle of the morning, the flowers, if still wide open, were remaining so on borrowed time. I had to work fast.

A dying flower is a far cry from that same flower in all its glory. But few persons ever see the giant cactus flower, withering or otherwise, at close enough range to know what it looks like. Found only in Arizona, northern Mexico, and isolated spots in California along the Colorado river, the plant itself is a treasured sight to tourists. The flower at its best is a rare sight, indeed. Many mistake the bright crimson fruit which follows to be the flower itself, so showy and gaudy is it.

When ripe, the fruit splits into three sections, from two to three inches long, each revealing a lining of bright red pulp. From the ground, these look like gorgeous velvety petals of a crimson flower. To the Indians, who knock the fruit down with long saguaro ribs, this pulp is a luxury for making jam, dried fruit and beverage. The seeds are a source of chicken feed.

To many kinds of desert birds, it is a delicacy rich in nourishment. In midsummer, when the desert is parched and hot, you can revel in the gaiety of the wren, the dove and the mocking

bird, as each perches high on a saguaro top and feeds joyously from the storehouse of Nature.

I never saw a picture of this: a bird perched upon a saguaro top—

eating fruit or devouring insects. But now I know the reasons. I no longer wonder why you don't see more pictures of the giant cactus flower—and the fruit that follows.



A ladder was used to gain altitude. This is a self-photo by the author.



Imprinted in the sand and limestone strata of Grand Canyon are fossils and fossil prints which reveal much regarding life on this earth millions of years ago. The Hermit shale discussed by the author, lies immediately below the band of light colored Coconino sandstone near the top of the rim in the upper right corner of the picture. Photograph, courtesy William S. Russell.

They Left Their Prints in Stone

Millions of years before men walked on this earth Nature was producing strange forms of plant life. Some of them could not adapt themselves to changing conditions of climate—and perished. But in the layers of limestone that form the walls of Grand Canyon, and in other places, paleontologists have discovered well-preserved fossils and fossil prints revealing the form of those extinct members of the plant world. Jerry Laudermilk tells us about some of them in this story.

By JERRY LAUDERMILK
Sketches by the Author

THIS is a yarn about a collection of weird plants from Arizona. Some of them are cosmopolitan and are known to have lived in such far away places as Siberia

and India. But not recently. You could search the whole earth and not find a single living one of the lot. These plants grew in northern Arizona during one of the strangest chapters in the biography of Mother Earth, the Permian period.

The strata of this age, like the pages of some grim old book, record a vast lapse of millions of years when geological revolutions and hard times made life tough for every living organism on the planet. This is a most important period in the history of the world. It marks the passing of the lush times, that age of over-production which geologists call the Carboniferous period. In short, the Permian came on as inevitably as any other hangover. It was a time of trial, and members of the vegetable world had either to make good by meeting new conditions or pass from the picture entirely.

Some of the prehistoric plants, the conifers and ferns, were able to survive and leave descendants to carry on the traditions of their tribes. Others couldn't take it.

The story of these plants is recorded permanently in their shrunken fossils, which, like faded mementoes in some old book, have been pressed flat between the slabs of siltstone that make up the Hermit shale.

The Hermit shale lies near the top of the pile of ancient records (strata) sliced through by the Colorado river. Its red band stands out among the other strata like a layer of jelly filling in a cake. A profile through the canyon wall at Grand Canyon station is something like a section through a vast heap of books, the geological strata, but



Walchia piniformis, a beautiful coniferous tree related to the modern star-pines, is a cosmopolitan from the Hermit shale.



Sphenophyllum gilmorei is one of the commonest of the fossils found in Hermit shale. It has no close living relatives today.



Yakia heterophylla, a comparatively recent genus found in Hermit shale. Probably is a member of the great seed-fern family.

this stack was disarranged almost from the beginning of time. Some volumes are hard to find and others are missing. When you compare this heap of stone books with other sections where stratum follows stratum in orderly sequence, you see gaps of missing millions of years.

When we begin to browse through these volumes, commencing at the level of the Colorado and reading upward, we find first, the basement complex of the Vishnu schists, a tangled mass of granite, pegmatite and gneisses laced through by volcanic intrusions. It is possible that the stuff in these rocks once made up part of the original crust of the earth. Now they are so changed by time, heat and pressure that their original nature can only be guessed at. At any rate, geologists know that these rocks once formed the foundation of a vast range of mountains in the Archean era, a time so remote that any figure in years is meaningless. These rocks are all set aside in a sort of geological morgue called the Pre-Cambrian era.

Eventually, after this ancient land had been worked over by water, earthquake, wind, volcanic action and all the rest of the tools Mother Nature uses in sculpturing the face of the earth, the land sank and the sea crept in and covered everything. This phase marks the opening chapter of Volume II called the Grand Canyon System with a confused record of subaerial and submarine deposition. This formation could have a better name since non-geological folks might very reasonably suppose that the name applied to everything in the Grand Canyon from top to bottom. The evidence for life in this formation is all indirect.

Above Volume II comes the Cambrian. During this time practically all life was limited to the sea and low marine organisms such as sponges, corals, molluscs and strange flat many-legged things like overgrown pill-bugs, the *trilobites*, dominated the waters. These bottom-dwelling scavengers with nervous equipment of such low grade that an average modern cockroach would appear inspired by comparison, were the highest forms of life the earth could

show for a possible 150,000,000 years. So far there was not a dry-land plant anywhere.

Time passed and the old Cambrian sea receded. Its floor, now dry land, underwent all sorts of re-sculpturing and Volume III of the earth's history came to a close.

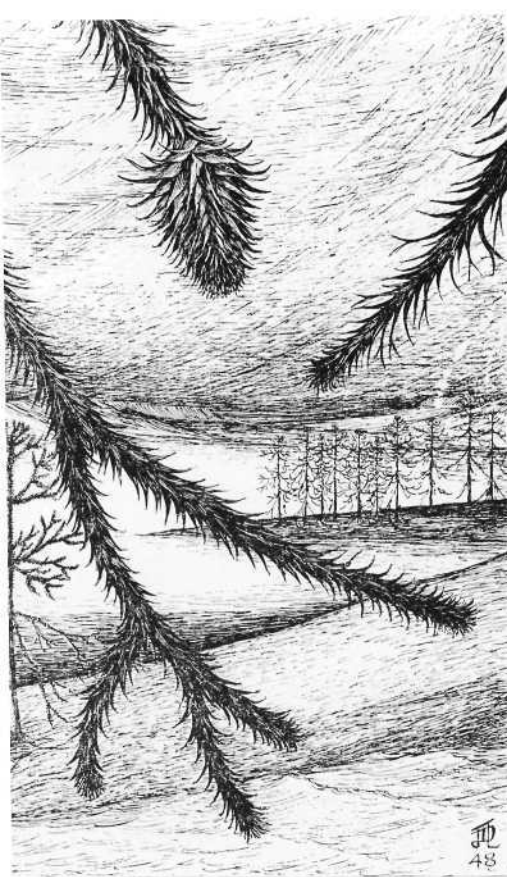
It is a remarkable fact that two important volumes, the Ordovician and Silurian periods which should follow next do not appear at all among the Grand Canyon records but the next, Volume VI, the Devonian record is represented in a sketchy way.

During the Devonian, fish dominated the seas, and plants, some of which Nature had obviously adapted from marine algae, were beginning to make a good showing and added a touch of green to the otherwise barren landscape. Here, during the Devonian, all was beneath the ocean.

After the Devonian we reach Volume VII, the Carboniferous period. In America, geologists divide it into two sections, the Lower Carboniferous or Mississippian and the upper or Pennsylvanian. This was the age when plants reigned supreme and it lasted a long time. The Pennsylvanian is lacking in most of the Grand Canyon records but is well known from other parts of the United States.

Although the reign of plants came to an end through unknown causes, geologists have some ideas on the subject. One favorite theory is that the early atmosphere was supercharged with carbon dioxide, which, plus plenty of water, led to a regular vegetable debauch over the entire world. As the plants grew so furiously, the reserve of CO₂ was used up. In short, the world-wide system of jungle is assumed to have eaten up practically all of the heavier atmospheric blanket. This left the world so thinly clad that it radiated away much of its warmth—like a lodger in an old time Arizona hotel when two sheets were supposed to be enough cover for anybody. Atmospheric disturbances caused a period of world-wide water shortage.

At last the Carboniferous graded off into a period of general depression and the Permian period was well underway. The old giants of the vegetable kingdom went under



Ullmannia frumentaria — another weirdly beautiful tree related to certain modern conifers. Note the cone-like tip on the twig.



Taeniopteris angelica — a striking plant with ribbons sometimes 20 inches long. It was found west of Bright Angel trail below El Tovar.



Callipteris conferta. This plant was one of the cosmopolitan species. It belongs to one of the extinct tribes of seed-ferns.

in the struggle to live and only the adaptable tribes survived.

Volume VIII, the Permian record, lies near the top of the stack at the Grand Canyon. It is made up of strata of two main types, limestones which say that part of it was deposited under the sea, and eroded red, pink and tan sandstones and shale which tell of conditions on the dry land. Most of this life record is contained in the Hermit Shale.

The first notice that important plant fossils were to be found in the Hermit shale, was in 1915 when Professor Schuchert of Yale university discovered several specimens of Permian plants in the shale at Red Top in the Hermit basin. Most of Schuchert's plants had been reported from other parts of the world. Later discoveries showed that an extensive flora existed in the Grand Canyon locality during the Permian and at least 35 species were identified. The mineralogical make-up of the shale tells a great deal about the climate and even the nature of the landscape in which the plants grew.

Apparently, a vast flood plain or delta had formed over the region. The material spread out by the rivers was practically all fine stuff and there were no high mountains. It was a monotonous landscape being silted up by two kinds of material—aeolian sand and dust carried by the wind, and mud washed down by the rivers. Certain peculiarities of the shale indicate there were striking variations in the volumes of water that filled the channels from time to time. Sometimes they swirled along in full flood, at others their courses dried to slimy stretches of red gumbo which baked hard during the summer.

Around the borders of stagnant pools and sluggish streams the vegetation grew rather abundantly, its green color in sharp contrast with the red of the background. Since 36 species grew side by side, things were not too tough in the vicinity of the water and up side canyons and arroyos where the ground was a trifle moist. None of these plants was large. Even the trees, *Ullmannia* and *Walchia*,

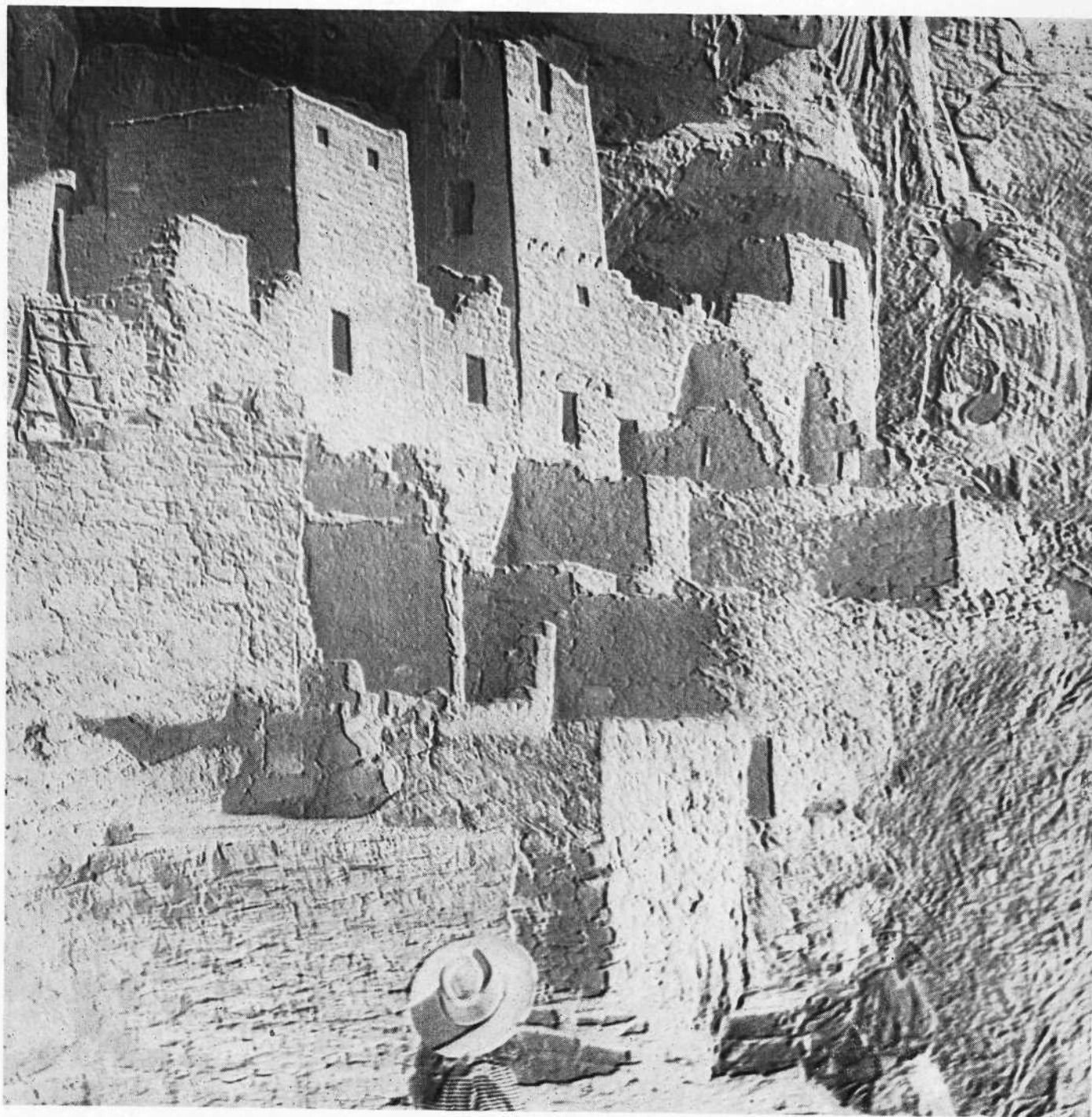
types related to modern conifers and the biggest things in the floral assemblage, had trunks only about five inches in diameter. The external anatomy of the fossils shows that they were adapted to life in a dry atmosphere. Leaves and stems were frequently protected by felted hairs, scales or thickened epidermis. Some had leaves that could curl inward and roll up like quills to cut down surface evaporation.

Hermit shale fossils are different from those that had their origin in the swamps of the Carboniferous forests. These Arizona specimens are all casts.

Casts tell us that the Hermit shale plants fell into loose, porous sediments which allowed decay bacteria to do their work. This process went on in mud, moist yet stiff enough to retain the shape of the plant fragment after it had been completely destroyed by the bacteria. Mud washing into these molds hardened into fossils that retained sharp impressions of the original. Naturally the inside of such a cast tells no more about the inside of the plant itself than would the inside of a marble statue give information about the inside of a man.

Reconstructing a picture of a fossil plant from the scraps is a good deal like putting together the pieces of a torn up portrait of someone you know. Much of the work consists of applying a fair grade of common sense in the right places. Suppose you have two twigs of oak of unfamiliar species. Neither twig is a good specimen but one has fairly well preserved acorns and one or two scraps of leaves, the other has a few leaves, or pieces enough to show how they grew and a scrap of an acorn. From what you have you can tell that you are dealing with two bad specimens of the same species of oak. Now, by using a great deal of patience, botanical know-how and lots of common sense, parts of both specimens can be assembled in one picture to make an accurate reconstruction.

Thus we are able to bring back the scenery and plants that lived in Arizona when the flora of the Hermit shale was green.



Mesa Verde Ruins . . .

For the desert photographer who wants to try something different, the picture above by Willard Luce of Provo, Utah, may suggest interesting possibilities. The photo was produced by what is known as the bas-relief method. The original negative was made in the usual manner—in this case with a Recomar 33 camera, 1/100 sec. at f.19, Super XX film. Then the negative was placed in a contact printer as if the conventional paper positive print was to be made. But instead of using sensitized photographic paper for the print, a piece of unexposed film is used and an extremely brief exposure given. The

resulting film positive looks like the negative except that the light and dark areas are reversed. The film positive and negative are then placed together slightly out of register with one another so the two images do not exactly coincide. The films are taped together in this fashion and printed or enlarged in the usual way on photographic paper. The term bas-relief indicates figures which are slightly raised from their background, and this is one of the most striking features of the method—a feeling of the dimension of depth in the photograph.



Wolf trading post ruins in 1932. Newberry mesa in the background is on the opposite side of the Little Colorado.

Pioneer Trader to the Navajo

The Apaches were still running wild in Arizona when Hermann Wolf established a crude log trading post along the Little Colorado river in 1868. But he was quick with a gun and unafraid—and these assets plus the friendship of the Navajo Indians enabled him to survive in a period when Indian trading was a hazardous occupation.

By TONEY RICHARDSON

OVER the years I have watched the walls of the old Wolf trading post in northern Arizona crumble away. Undoubtedly it was the earliest trading post established in the western Navajo country. All through those years I have sought from every possible source to piece together the story of the post, and of the man who built and ran it for 25 years, for the saga of the Wolf post is largely the story of Hermann Wolf.

The legend persists that Wolf fled from Germany following a duel. There is no record to confirm this. We know only that more than 100 years ago, during the period when trapping was a lure that brought hardy men into the desert wilderness west of the Rockies, Hermann Wolf arrived in this region. He was a six-footer, prematurely grey, in the hey-day of the fur trade.

He rode with Kit Carson's mountain men in 1838, the year high silk hats played havoc with the beaver trade. Later that year he went out hopefully with Billy Mitchell, the Ohioan, and Fred Smith of Texas. These three roved far and wide over the Southwest, and returned disheartened by the disappearance of both beaver and the beaver trade.

In a letter written from Taos to his sister, June 17, 1845, Fred Smith mentions being in a party composed of old Bill Williams, Perkins, Billy Mitchell,

Hermann Wolf, Charley Seifert, and Jim Ross.

Smith gives a good description of Wolf. He writes that he is extremely moody and silent. In Smith's words:

"Hermann has never been known to run or back down from a fight. He's a topnotcher fighting redskins and has took many sculps. I remember a time we stopped off in Touse. We had plenty of money and was drinking it around. A man called Jose Baca thought he would jump on and rob Hermann. Hermann was just standing around minding his own business, doing no drinking. The man made some swipes at him with a knife. Then Hermann hit him with a boot after that like he was busting out a bull boat. Some more ganged up to do Hermann in. The rest of us Americanos and especially the Tejanos spied what was doing and made out run. Before we got there Hermann shot Baca plumb dead through the brisket. We quit Touse in the hour on account Hermann said he didn't aim for to have to shoot no more men."

When the American army took over the Southwest in 1846, Wolf went down on the Little Colorado. Between the present site of Winslow and Grand Falls he found the river lined with willows. There were some beaver, and Wolf set about trapping them. He worked the Little Colorado river and then went down into the Grand Can-

yon. Later he came out and trapped the small canyon tributaries of the Colorado. He started for Santa Fe in the spring of 1848. Near where Holbrook stands today, the Apaches jumped him. They robbed him of every fur he packed on two big mules.

Wolf escaped with his life. He was seen in the valley of the Green River in Utah in 1857, was back at Taos in 1859, and from there came back into Arizona.

At the outbreak of the Civil War he departed from Taos ostensibly for St. Louis, Missouri. For the next five years there is no record of his activities. However, it is believed he served on one side or the other.

Following the war Wolf reappeared in Taos and Santa Fe. In the fall of 1866 he followed the Rio Puerco to the junction with the Little Colorado, and thence west along that stream. He came out in the spring of 1867 with many furs, despite the roving bands of Navajo, Paiute and Apache along the river.

In the spring of 1868 he was not so lucky. Apaches caught him in Tucker Flat, between Winslow and the river. He turned on them. In an hour he killed four and fought his way through to the north side of the river with his pack animals intact.

He returned to the Little Colorado in the summer accompanied by three Mexicans driving nearly a score of mules and horses bringing in trade

ford was called Voltz crossing and is so referred to by a few writers. This, however, was in error for that crossing is farther up the river.

A band of renegade Navajo, believed to be Manuelito's old followers, attacked Wolf post in 1869. The arrival of friendly Navajo saved the trader.

After 1870 the California-Santa Fe trail crossing northern Arizona around the head of Canyon Diablo was used more and more. Freight outfits were not making frequent trips to Santa Fe. Wolf, therefore, had a new outlet for his Indian products and furs, sending them to New Mexico and arranging for supplies to be brought back to his lonely place.

The last big Indian raid came in 1870. A war party of Utes rolled down from the north. They crossed the Navajo reservation, detoured the Hopi villages, and headed for Wolf post. The Navajo sent their flocks and women and children to safety. Rallying in force to repel the invaders they chased them into the wilds of Black Mountain where the Utes escaped.

Mormon immigrants to Arizona started coming down the river past Wolf's trading post in the summer of 1874. It was about this time that Navajo who had been hunting in the San Francisco peaks country reported to Wolf that some renegade Paiutes there had a white woman captive. Some Yavapais coming from there to trade denied this story, but the night after they departed one of them slipped back to sell Wolf the information that the story was true.

Wolf made a deal with B'ugoettin to rescue the white woman for \$100.00 in trade goods. The afternoon B'ugoettin departed two bronzed riders off the California-Santa Fe trail held up Wolf post, taking clothing and supplies.

B'ugoettin returned to report a tragedy. The renegade Indians had become alarmed and fled from the San Francisco peaks. But they left behind them two young girls, and a woman who must have been their mother, dead.

A small band of Apaches made one more try at Wolf's post in October 1874. They got no closer than Canyon Diablo where they turned back when they learned that Navajo were coming to meet them. In Sunset Pass they met the 5th U. S. Cavalry and a sharp fight ensued.

Surveys for the Atlantic & Pacific railway (now the Santa Fe) were going on. Traffic increased along the trails which passed near Wolf's trading



Hosteen Bekinni, who knew Hermann Wolf in his youth, and traded at the Wolf post when the trader was living. Photo U. S. Soil Conservation.

post. Mormons were coming past in larger numbers. They founded Brigham City, first called Ballenger, in 1876.

Wolf was held up and robbed five times by whites in 1880. He decided to erect a stone building in a new location. A few hundred feet to the east of the old stockade and on higher ground, Wolf built a square post of red sandstone. One part was used as a store, the back of the establishment as kitchen and bedroom until two years later when a long building was added to the store.

The building of the railroad to Canyon Diablo in 1881 brought a great change to the country. A small boom town sprang into existence and thrived until the railroad finally moved on across the deep canyon. Small stores and gambling halls came into being. But these disappeared and in 1884

only one store remained, that of C. H. Algert.

The coming of the railroad brought Wolf new access to trade goods. Yet Indian trade no longer meant much to him. He was well along in years, and after 1890 spent most of his time sitting in a chair while clerks transacted the business. He communicated with relatives in Germany, and once or twice a year received barrels of bottled Rhine wine.

Stories persisted that all his wealth was buried somewhere about the post, or down in the river canyon in cracks in the rocks.

While his store helper was away with the freight outfit in 1885, five renegade whites broke into the back of the post at night and threw guns on the old man. Demands to produce his hidden hoard brought nothing. They tied him up and used hot wires on his

feet. Wolf denied he had any money.

The following day Navajo found Wolf unconscious on the kitchen floor, and revived him. From then on Wolf never failed to bar his doors, keep a wagon near at hand, and eye strangers with deep suspicion. The old free days of the west were gone.

Cattlemen brought their herds in along the river. Their cowboys had frequent skirmishes with the protesting Navajo. Some of these disputes were settled by Wolf, yet he still did not become friendly with the occasional whites who came to the post.

No one supposed that Wolf had any relatives, since he never mentioned them, but in the spring of 1899 while in Flagstaff, Wolf told Dr. Miller and Edgar Whipple, Flagstaff undertaker, that he had communicated with his brother, Franz Wolf, a retired major-general of the German army who was about to set out on a world tour.

During the last week of August that year Wolf went to Flagstaff in his freight wagon. He explained that his brother was then in San Francisco and was coming to visit him. However, the brother did not arrive as expected, and Wolf complaining of feeling ill, departed for the post September 1.

He arrived home a very sick man, but would not let his clerk send for a doctor. Finally, when Wolf became unconscious, a messenger was sent to Canyon Diablo to telegraph Flagstaff for a physician.

Meanwhile the brother had arrived in Flagstaff. When the message reached Dr. Miller, General Wolf joined him, the two men taking the first train to Canyon Diablo. When they arrived

at Wolf post at midnight on September 4, they found that Hermann Wolf had died at nine o'clock the evening before.

Edgar Whipple brought a casket to Wolf post, and they buried Wolf in the cemetery at Canyon Diablo. The tombstone inscription reads:

*Hermann Wolf
Starbam
3 September 1899
1M 69 Lebensjahre*

If correct, the age given on the tombstone, which it must be remembered was placed there by men who knew little about Wolf after General Wolf departed Arizona, then he would have been born in 1830. But this is entirely inconsistent with evidence that Wolf rode with Carson's mountain men and with the stories about him related by the Navajo. Pioneers who visited Wolf post in the 1880's have told me that they are positive the man was at least 90 when he died.

Senator Carl Hayden of Arizona has long been interested in gathering the true story of Wolf. He has at his command sources which should settle some doubts. Yet what he has discovered merely clouds the picture the more. From War Department records, comes the story of two Wolf's. One Hermann Wolf, born in Saxgotha, Germany, enlisted in 1st U. S. Artillery, December 12, 1853, and deserted the following day. One Hermann C. Wolf enlisted in the infantry in 1854, and died in 1855 in Nebraska Territory.

The administrator of the Wolf estate, himself a German, wrote me several times that he knew nothing what-

ever about Hermann Wolf. He listed in probate court as relatives a brother and sister. Major-General Franz Wolf, and Frau Geheimrathin Becker, both of Kelbra am Kyffhauser, Prussia.

The ruins of old Wolf post can be reached from U. S. Highway 66, by a dirt road from either Flagstaff or Winslow to Leupp. Thence 12 miles down the river past the site of Tolchecko. There on a lonely promontory beside the river stands all that is left of this historical trading post.

The wind swept ground about the walls are littered with hand-made square nails, colored bits of broken bottles, and obsolete caliber cartridge shells. The number of the latter is astonishing, testifying to the fact that Wolf fought off raiders and bandits alike.

That the mysterious Wolf had gold buried somewhere near is more than mere rumor. On more than one occasion he was seen to leave the post, returning with a leather sack of gold coins, when it was necessary for him to have more money than was in the store.

George McAdams, and S. I. Richardson, who operated the trading post immediately after Wolf's death, spent much time seeking this purported treasure. They turned over every rock, and dug up the ground about the area, yet found nothing more than old caches where something had been buried.

What became of the savings, reported to have been considerable? The answer to that question is shrouded in the same mystery which surrounds much of the life of the man himself.

Rendezvous for Liars . . .

Since no one has reported finding Pegleg Smith's three lost hills covered with gold nuggets during 1948, the old-timers of the Colorado desert have announced that the second annual Pegleg Trek is to be held in Southern California's Borrego valley, January 1, 1949.

The summons for all lost-treasure hunters to assemble for the historic event was sent out late in October by Harry Oliver and Ray Hetherington who sponsored last year's hunting party.

The Pegleg Trek this year is to be a double-barreled affair. In addition to the quest for the missing nuggets, there will also be a search for the biggest liar in the desert country.

The Liar's contest is to be held at the campfire program on New Years Eve, at the site selected for Pegleg's monument. The participants, and all who care to listen to their tall tales, are invited to bring their bedrolls and make an all-night camp of it on the sandy

floor of the desert near the base of Borrego's Coyote mountain. Campers are warned that they should bring their own grub and water, as there are no hot-dog-and-soda stands in the vicinity.

Having selected the champion liar and gotten a night's sleep close to the good desert earth, the gold hunters will be free to follow their hunches early the next morning when the quest for the long-lost treasure is to take place.

Those who are unable to be present at the campfire doings may join the trekking parties on New Years Day.

Committee in charge of the event this year is composed of Ray Hetherington, Harry Oliver, John Hilton, A. A. (Doc) Beatty and Randall Henderson. Ed Duval is to be camp foreman, and Desert Steve Ragsdale, Hank E. W. Wilson and Major Robert Ransom have been named judges of the Liar's contest.

For the information of those who missed last year's Trek, the Pegleg gold hunt is a very informal affair—any person being eligible for the hunt after depositing ten rocks on the mound which is being erected as a monument to Ol' Pegleg.

MINES AND MINING . . .

Report on Uranium . . .

Uranium mining is becoming increasingly prominent in Western mining circles, with the announcement of discovery of new deposits in Nevada, Arizona and Idaho, charges that the Atomic Energy commission is bungling its purchase program, and claims by the committee that it has made important moves to boost uranium production.

W. A. Flower, who has mined for years in the Meadow canyon area of Nye county, north of Belmont, declares that a four-foot width of shaly material immediately adjoining his gold vein carries enough carnotite to register a sufficient number of ticks on the Geiger counter to make it commercial ore. In Arizona Director Charles Dunning of the state department of mineral resources said that an inspection of Hack's canyon, 37 miles southwest of Fredonia, revealed three deposits of uranium, one carrying pitchblende which might qualify it for the bonus offered by the AEC. And the Shoup brothers—G. Elmo and R. M.—report uranium ore on their claims southeast of Salmon, Idaho. The vein, six feet deep, can be traced for 360 feet. The Geiger counter gave as high as 160 clicks in half a minute, it was said, and samples assayed showed as much as 2.51 per cent uranium oxide.

The Atomic Energy commission announces that it is negotiating with the Vanadium Corporation of America to buy uranium from two ore treatment plants to be brought into operation by the corporation next year. One of the plants is to be built in the White canyon district of San Juan county in southern Utah. The committee foresaw a stimulation of prospecting for and mining of the "vitally important ores" as a result of these developments and declared the Navajo Indians might benefit since part of the ores might come from their reservation.

But a prospector who asked the U. S. bureau of land management to give an interpretation of the protection offered one who located a claim on fissionable material was informed: "This department has taken the position that a location under the mining laws based on a discovery of uranium, thorium or other material peculiarly essential to the production of fissionable material made on or since September 13, 1945, confers no rights whatever to those materials and is invalid." A location could be made on other minerals "of commercial value" on the claim, the bureau said, but all fissionable material could be disposed of only under direction of the AEC.

And the *Moab Times-Independent* of Utah charged that operators in the area of the Grand Junction or Monticello receiving depots of the Atomic Energy commission are being forced, through a "continuous, never-ending series of delays," to abandon uranium mining. If it weren't for the fact that a private company, the Vanadium Corporation of America, was buying uranium ores at Naturita, Colorado, practically all carnotite mining in the area would be at a standstill, the paper said. At Dove Creek, the *Moab* editor interviewed Fendoll A. Sitton, who had purchased \$42,000 worth of equipment and employed 30 miners to work his claims. Sitton declared he had

stopped all mining operations, was selling his equipment and would sell his claims, largely because of the methods in use at the Monticello depot, according to the *Times-Independent*. The number of Atomic Energy commission employees at Grand Junction and Monticello is greatly in excess of the actual number of uranium miners now in the field producing ore for the AEC receiving depot, the editor charged.

NEW WELLS REPORTED IN UTAH OIL TESTS

With the bringing in of what appeared to be additional producing wells, Utah oil excitement continues. An oil well estimated to be good for 60 barrels a day has been reported from Boundary butte in the Four Corners area of southeastern Utah. The well, English Tribal No. 2, is located about 40 miles from the Colorado line and within two miles of the Arizona line. It was reported as producing from the Cocconino sand just below the 1500 level. The oil was declared to be of 42.7 gravity, which commands a premium price.

Important oil showings are said to have been obtained by the California company at its well 12 miles southwest of Escalante, and officials said indications were that a production of 192 barrels a day will be reached. The wildcat well is the company's first test in the area, and the top of the producing limestone, believed to be of Pennsylvanian age, was logged at 8777 feet. Other showings of oil were reported when the drilling was in the Kaibab and Coconino formations, but testing failed to develop commercial quantities.

The discoveries have resulted in a substantial increase in applications for leases on state-owned land, the state land board reports. After Equity Oil company brought in the first well, in Uintah county, there were seven applications for the same kind of leases in that county. Following announcement of the California company showing, 12 applications for leases for oil and gas exploration were received, four in Garfield, four in San Juan, three in Carbon and one in Wayne counties.

Test wells were being drilled 10 miles southeast of Greenriver, at Thompsons, and near Crescent Junction.

Tooele, Utah . . .

The holdings of the National Tunnel and Mines company were sold at auction October 4, to the Anaconda Copper company for \$500,000. The properties, including the Elton tunnel, buildings and more than 5000 acres of patented mining claims, had been estimated to have a value of \$6,000,000. The 23,000-foot tunnel, running eastward from Tooele to connect with the workings of the Apex and Highland mines on the Bingham side of the Oquirrh mountains, was completed in 1941. In addition to draining 2500 gallons of water per minute from the mines, 800,000 tons of ore were moved through the tunnel during World War II. When government subsidies on copper and lead were dropped, it was said, the ore was not of high enough grade to pay for its mining.—*Salt Lake City Tribune*.

Goldfield, Nevada . . .

Pannings at the Gold Seam Mining company property, located in the Divide dis-

trict of Esmeralda county, reportedly have shown ribbons of gold two and three inches long. The pannings were made from dump ore taken years ago from the 100-foot level of the old mine. The Gold Seam was said to have been shut down 40 years ago because of litigation and has not been operated since. The 200-foot shaft is now being re-timbered under supervision of Pete Mosher of Goldfield.—*Goldfield News*.

Searchlight, Nevada . . .

William Roller, president of Metallic Exploration company, claims that his company has relocated the lode of the famous old Duplex mine, one of the largest producers in early southern Nevada. Its discovery in 1897 resulted in the roaring gold camp of Searchlight, and the loss of the lode, which ended against an enormous fault, was one of the chief reasons for the decline of the town. The new venture has been named the Metallic mine. Roller and his associates began diamond drilling the property months ago in an effort to pick up the vein.—*Pioche Record*.

Ajo, Arizona . . .

Foley Brothers, Pleasantville, New York, have been awarded a contract for construction of the huge new smelter plant of the Phelps Dodge corporation at Ajo. The plant will have an estimated capacity of 100,000,000 pounds of copper a year and will be able to handle all the mine and mill production at Ajo, according to Robert G. Page, corporation president.—*Tucson Citizen*.

Basalt, Nevada . . .

Del Wilson of San Gabriel, California, has bought the Bluepoint turquoise claim, 11 miles north of Basalt in Mineral county, from Charles Joseph and George Dyer. Wilson has taken possession and already has mined a small quantity of turquoise from the property. The gemstone occurs in nodules and narrow veinlets and is said to be of high quality. It was discovered two years ago.—*Tonopah Times-Bonanza*.

Beatty, Nevada . . .

Ralph Lisle, Sammy Colvin and Hank Hegerman, leasers, reportedly have opened up an excellent grade of ore at the Ubehebe mine. It carries lead chiefly, but shows quantities of zinc, gold and silver, and assays have indicated high values. Two truckloads were sent directly to the smelter in Salt Lake, but future shipments will be in carload lots from Las Vegas. Lisle has been trucking the ore to Las Vegas while Colvin and Hegerman are working the mine. The trio of Beatty men hold a year's lease on the property.—*Beatty Bulletin*.

Taos, New Mexico . . .

The bureau of mines has disclosed that it will seek to develop peacetime mining in the pegmatite deposits of Taos county during 1948-49. Pegmatite yields tantalum and lithium, beryl and other minerals. Large amounts of beryllium reportedly will be used in atomic energy plants. The pegmatite hunt in New Mexico and other states is a major project under the \$1,500,000 appropriation for investigation of domestic mineral deposits.—*Santa Fe New Mexican*.

Luning, Nevada . . .

Reports are current in Luning that Kennecott Copper corporation has taken a lease and option on property owned by Pete Peterson and partners of Mina, just off the old Rawhide road 12 miles from Luning.—*Humboldt Star*.

HERE AND THERE . . . on the Desert

ARIZONA

Bridging the Colorado . . .

GRAND CANYON—M. R. Tillotson, regional director of the national park service, told Grand Canyon Rotarians details of building the 440-foot trail bridge across the Colorado river at Bright Angel creek in 1928. The eight suspension cables, each 548 feet long and weighing 2030 pounds, were unrolled and carried down the trail by crews of Supai Indians who took two days for each round trip. The remainder of the 122 tons of material used was fabricated in pieces small enough to be carried down on mule back, with no item longer than eight feet two inches or weighing more than 150 pounds.—*Coconino Sun*.

Peanuts in Arizona . . .

CONTINENTAL—Spanish peanuts were planted experimentally for the first time last year in the area around Continental, 30 miles south of Tucson on the Nogales highway, and were so successful that 1505 acres were planted this year. On the current market the nuts bring \$210 a ton and are shipped to Texas where they are made into oil and peanut butter. One of the pioneer peanut growers near Continental is a mining engineer, another a former bookkeeper. The largest grower is Inter-Continental Rubber company.—*Tucson Citizen*.

Magdalena Pilgrimage . . .

NOGALES—Thousands of Indians from northern Mexico and Arizona made their annual pilgrimage to the shrine of San Francisco Xavier at Magdalena, Sonora, early in October. The pilgrimage, which dates back to the founding of a mission by Father Eusebio Kino in the 17th century, swelled the population of the little Mexican town from 3000 to more than 10,000. Climax of the ceremony was said to be a processional past the shrine, where many pilgrims attempted to lift the image's head in a centuries-old belief that they would be cured of sin for all time. Hundreds of Papagos from southern Arizona reservations took part in the pilgrimage.—*Yuma Sun*.

Giant Rug at University . . .

TUCSON—A black, white and red Navajo rug measuring 13 by 27 feet and said to be one of the largest in existence is on exhibit at the Arizona state museum on the University of Arizona campus. It was woven by two Indians living in the lower Greasewood springs area and took two years to complete. The rug is one of the finest in design and weave, according to Emil W. Haury, museum director, and won first prize for aniline-dyed bordered rugs at the 1942 Gallup Ceremonial.—*Tucson Citizen*.

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MISCELLANEOUS

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That Crater Again . . .

HOLBROOK—Dorsey Hager, said to be one of the leading petroleum geologists of America, told the Holbrook Rotary club that the world-famous Meteor crater of northern Arizona was a "structural oddity" and was not made by the impact of a great mass of meteoric materials. He said that aerial photographs showed the crater to be rectangular rather than circular, that the rock strata at the crater bend upward rather than downward and retain their relative positions on the side of the crater with the strata in surrounding territory. Hager did not advance any reasons for the finding of tons of meteorite fragments around the crater and said that the crater and similar structural formations in other states are as yet unexplained.—*Holbrook Tribune-News*.

Tucson Is "Masheen" . . .

TUCSON—Two Seri Indian brothers, who live on Tiburon island in the Gulf of California, received their first taste of civilization when William Neil Smith brought them from their primitive homeland for a week in this Arizona city. Smith has been living with the Seri, doing ethnological research for a master's thesis at the University of Arizona. The boys, Jesus Montano, 19, and Jose Montano, 20, were introduced to innerspring mattresses, hardware stores, church organs, movies, houses with furniture, and milk shakes and took an airplane ride. Everything was "masheen," translated as meaning wonderful, beautiful, good and fine.—*Tucson Citizen*.

They Won't Take His Challenge . . .

DOUGLAS—Joe Clark, 81-year-old cowboy, has issued a challenge to any man 80 years old to match him at jig dancing, boxing and "rassing." Clark claims he has issued the same sort of challenge since the first annual rodeo in Douglas, but never has had a taker. The 180-pound six-footer expects to issue another challenge soon for a walk from Douglas to Los Angeles, and is keeping in shape with daily five-mile walks.—*Tucson Citizen*.

Bible in Navajo . . .

PHOENIX—Reverend William Goudbert has been working for the past 18 years at the job of translating the Bible into Navajo and so far three books—Mark, John and First Corinthians—have been completed. Rev. Goudbert and a group of Navajo men and women who are planning to become Christian missionaries work the translation out. Sometimes a single verse takes a whole day's work. Translation is from the original Greek since the syntax of that language is more like Navajo than is the English language.—*Gallup Independent*.

Interior Secretary Krug, off for a conference with Navajo leaders, declared: "The Navajo are not starving. There are too many Navajo on the reservations. We must train them for and get them to take jobs off the reservations."

Leo N. Bushman, commercial and industrial design artist and teacher of fine arts, industrial design and commercial art, has been appointed curator of art at the Museum of Northern Arizona, according to Dr. Harold S. Colton, museum director. He succeeds Virgil Hubert who has moved to Phoenix.

The *Cactus and Succulent Journal* reports that experiments at Tucson's Desert Laboratory have shown that it takes 85 years for a Ferocactus to reach a height of four feet.

CALIFORNIA

Mohave Leader Dies . . .

NEEDLES—James Bryan, 75, Mohave Indian leader, died at the Indian agency hospital in October. Born at Needles and a life-long resident there, Bryan was famous as a singer and dancer in his younger years and took part in all tribal ceremonies as well as public affairs. He had appeared at the National Orange show, Victorville rodeo and Las Vegas celebrations and was one of the performers at the dedication ceremonies for Hoover dam. His Indian name was Ernaria, translated as meaning Tail-light—*The Desert Star*.

Edom Is Gone . . .

THOUSAND PALMS—The old Southern Pacific railroad station of Edom has gone out of existence with the change of the station name to Thousand Palms. Thousand Palms village, a growing desert resort community one mile west of the station and 13 miles northwest of Indio, was named for the nearby ancient Indian campsite and native palm oasis.—*Banning Record*.

Last Passenger Trip . . .

BISHOP—What may have been the final passenger trip in the history of the Carson and Colorado narrow gauge railroad was taken by 100 members of the Pacific Coast chapter of the Railway and Locomotive historical society in October. The trip over the remaining 72 miles of trackage, from Laws to Keeler, was made on flatcars on which benches were provided. Gilbert Kneiss, president of the society and author of *Bonanza Railroads*, told the story of the railroad from its construction in 1880 through the Tonopah and Goldfield mining rushes, and the final abandonment of most of the line.—*Inyo Register*.

Camp Irwin Reactivated . . .

BARSTOW—Camp Irwin, located in the Mojave 38 miles north of Barstow, has been withdrawn from the surplus list and reactivated. Captain Cooper has taken over the duties of commanding officer and with 14 enlisted men is making an inspection of the base. The camp, which trained as high as 36,000 soldiers at a time during the second World War, will be used by thousands of newly inducted draftees in the near future.—*Barstow Printer-Review*.

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THE **Desert** MAGAZINE
Palm Desert, Calif.

Plan Death Valley Observance . . .

RANDSBURG—Plans for commemorating the 100th anniversary of the passage of the pioneers through Death Valley in 1849-50 are being formulated. A meeting of the California Centennial committees of San Bernardino, Inyo and Kern counties, together with representatives of Death Valley national monument, Pacific Coast Borax company and the American Potash and Chemical corporation, has been planned to determine the type of program which would be most fitting, with an outdoor pageant leading the suggestions.—*Randsburg Times*.

Mojave Windstorms . . .

RANDSBURG—You can almost tell your location during a good windstorm in the Randsburg area by the rattle against your car, according to Bob Hubbard. Up in Randsburg it is a fine sand, blowing from the old Yellow Aster tailings pile, matching Los Angeles smog for poor visibility. Down toward Indian Wells valley, visibility is better but more gravel and small boulders are in the air. Hubbard reports a seagull blown off his Los Angeles-San Francisco run by the last big breeze, circling the Ridgecrest airfield tower waiting for landing instructions.—*Randsburg-Ridgecrest Times-Herald*.

The Randsburg Times and the Ridgecrest Herald merged on October 1 to form the Times-Herald, published by the Indian Wells Publishing company.

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Atom Base Advances . . .

WESTMORLAND—The Atomic Energy commission has closed bids on construction of a Salton Sea test base to cost \$2,000,000. The base is at the site of the former naval air station at Sandy Beach and will be used to test equipment only. No radioactive materials will be handled. The base is to be completed by November 1, 1949. New construction will include a two-story laboratory, smaller laboratories and maintenance and housing facilities.—*Indio News*.

Operation Cement . . .

PALM SPRINGS—The Battle of the Cement Plant rages in the San Geronio pass area. Riverside county board of supervisors blocked construction of the plant with a zoning ordinance banning heavy industry in an area of 66 square miles around Palm Springs. Samuel Guiberson filed for an in-

junction against the county's action, and Palm Springs is filing a petition attacking all parts of Guiberson's complaint. William C. Dixon, assistant to the U. S. attorney general, asked for quick action since a cement shortage was delaying housing construction. Opponents countered with statements of other federal leaders that there is sufficient cement, and declared that there is an actual surplus in California.—*Palm Springs Desert Sun*.

Hard Rock Shorty

of
Death
Valley



"The road up to Cyclone Pass?" echoed Hard Rock Shorty in answer to the usual tourist question. "Shore, it's a good road—maybe a mite rough, but 's long as yu got a top on that station wagon they ain't no danger of yu bouncin' out.

"Better'n some roads I've seen in my time," Shorty added in reminiscence.

"Now you take that road me an' Pisgah built up Eight Ball crick to that sulphur claim we staked out back in the 'nineties. Why that road would jar the tail feathers off'n a road-runner.

"Yu see we cleared the road by pryin' the boulders outa that conglomerate in the floor of the canyon. But nearly every rock was buried deeper'n it showed, and when we got through the holes wuz worse than the bumps 'd been.

"Well we didn't want t' give up a road we'd put so much work on, so we hauled our supplies over it till the burros got so they could jump like jackrabbits. They wuz other bad features too. The canned beans that bounced in over that trail got to jumpin' and never stopped. When we opened a can we had to knock 'em down with fly-swatters.

"But we finally had t' give it up. Pisgah Bill balked. That was the day he was haulin' a 300-pound anvil up to the mine in the buckboard. He hit an extra big hole and the anvil bounced up and killed a buzzard flyin' overhead. The bird landed on Bill's new 10-gallon hat an' sorta made a mess of it. He ain't been over that road since."

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LITTLE NAVAJO BLUEBIRD, by Ann Nolan Clark . . . (Girls from 7) \$2.50

Story of the Indian country illustrated by the noted artist, Paul Lantz.

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SHADOW OVER WIDE RUIN, by Florence C. Means . . . (Teens) \$2.50

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Bill Keys Is Back . . .

TWENTYNINE PALMS—Bill Keys is back on the desert. Paroled after serving five years of a nine-year manslaughter sentence for shooting Worth Bagley in 1944, Keys' immediate aim is to clear his name and prove what he has always maintained, that he shot his desert neighbor in self defense. His wife, Frances M. Keys, has worked constantly for his release and recently Earl Stanley Gardner, mystery writer, became interested. With the intervention of other prominent criminologists, Keys was paroled. The couple are returning to the land near Twentynine Palms which they homesteaded in 1910, where, with their 17-year-old daughter, they will start rebuilding Keys' ranch.—*Los Angeles Times*.

Nearly 400 crack pilots participated in the eighth annual Salton Sea regatta, held October 15-18. Despite heavy rain, nine world's powerboat records had been broken by noon of the final day.

Tom Morongo, 82, member of the family for which the valley and the reservation were named, died September 25. His grandfather, Captain Cio Morongo, was a full-blooded Serrano and a noted figure in the early days.

NEVADA

Want a Hotel? . . .

GOLDFIELD—Historic Goldfield hotel, a four-story 150-room brick structure built in 1910 in the gold camp's heyday, has been offered for sale for \$100,000. The structure has been closed since Tonopah army air base was deactivated after World War II. When the hotel first opened, suites rented for \$20 a day, and mahogany woodwork in the lobby, heavy flowered carpets, leather upholstered furniture and heavy brass bedsteads made it the most elegant hostelry available.—*Goldfield News*.

Pinon Incense...

Bring the delightful fragrance of the Pinon Forest into your home or office. The burner is a miniature model of the outdoor baking ovens used by prehistoric Indians, and still in use in New Mexico pueblos. When the little cones of genuine pinon pine are burned in this tiny oven the aroma is a breath of the outdoor Southwest.

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Seek Gabbs Plant Title . . .

GABBS—Direct negotiations are continuing between Basic Refractories and Standard Slag company and the war assets administration for transfer of title of Gabbs industrial site to the companies and for lease of the housing project. Basic Refractories plans increased facilities for treatment of Gabbs ores now being shipped east by them, and Standard Slag reportedly intends to produce a special cement from the local brucite ores for use in steel furnaces. The State of Nevada has been considering taking over the Gabbs valley facilities to prevent their being scrapped by the federal government.—*Battle Mountain Scout*.

Wildlife Highway Casualties . . .

TONOPAH—A Tonopah man driving to Reno recently made a survey of birds and animals killed on the highway by motorists. The count: jackrabbits 27, skunks 4, pheasants 2, porcupines 3, ground birds by the dozen, ducks 2, mudhens 2, blackbirds 3, ranch chickens 1, housecats 2. The ground birds, it was said, congregate in flocks along the highways for the winter, and sometimes will take wing as a car approaches, only to be blown back against it.—*Tonopah Times-Bonanza*.

Bat Cave Discovered . . .

LAS VEGAS—Murl Emery, Colorado river boatman, reports the discovery of a rich deposit of guano in a cave 12 miles from the western end of the north rim of the Grand Canyon. He said they had explored the cave for nearly 1000 feet and had dug out accumulations of guano 22 feet deep without reaching bottom. The bat cave guano runs as high as 16 per cent pure nitrogen, Emery said, and is worth \$150,000 for fertilizer on the basis of deposits already surveyed.—*Tucson Citizen*.

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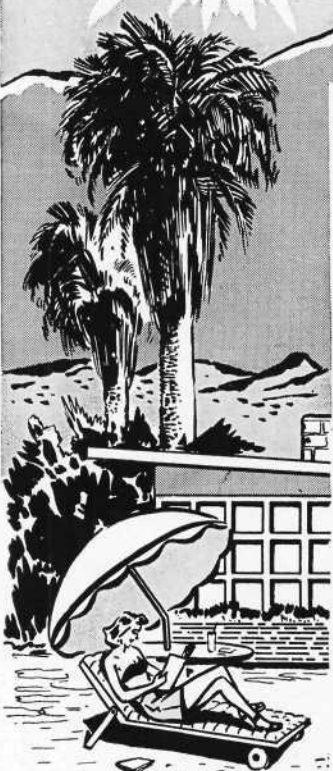
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Prizes for Photographers

You think that is an exceptional desert photograph you have taken? Try it in this month's Desert Magazine photo contest. Amateurs and professionals are eligible. The picture may have been taken last week or ten years ago, as long as it is essentially of the desert, its scenery, wild life, people, botany or history. Pictures are judged on suitability for magazine reproduction, originality, subject matter and technical quality. Let's see your prize picture.

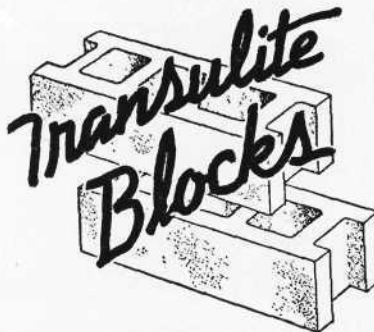
Entries for this month's contest must be in the Desert Magazine office, Palm Desert, California, by December 20, and winning prints will appear in the February issue. Pictures which arrive too late for one month's contest are entered in the next. First prize is \$10.00; second prize, \$5.00. For non-winning pictures accepted for publication, \$3.00 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED ONLY WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the Desert Magazine office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. Desert Magazine requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from Desert's editorial staff, and awards will be made immediately after the close of the contest each month.

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THE *Desert* MAGAZINE
PALM DESERT, CALIFORNIA



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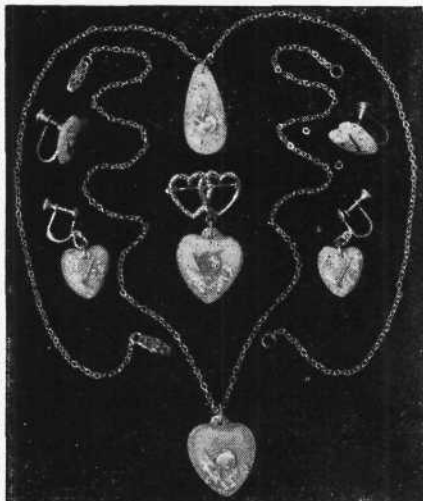
Power Allocated . . .

CARSON CITY—Nevada's Colorado river commission has allocated the state's 977,000,000 kilowatt hours of power expected annually from Hoover and Davis dams and 622,000,000 kilowatt hours were assigned to Basic Magnesium at Henderson. The remaining power is to be divided with 297,000,000 kw. to Southern Nevada Power company, 90,000,000 kw. to the Lincoln county power district and 12,000,000 kw. to the Overton power district. Governor Vail Pittman said the demand for Nevada's share of power had already exceeded the available supply.—*Salt Lake City Tribune*.

No Streets in Mesquite . . .

MESQUITE—When the Mormons settled Mesquite and Bunkerville in the Virgin valley north of Las Vegas, they laid out public thoroughfares. Later government surveys disagreed with the farmers' descriptions of their holdings and, as a result, the towns are officially without streets. The situation reached public attention when a new land owner with title to a sizeable chunk of Woodbury lane, one of the town's main streets, decided to construct a building in the middle of the lane. District Attorney Robert E. Jones has ruled that any avenue used by the public for 52 years belongs to the public, but he suggests that citizens holding similar property be required to re-deed the portion used for street purposes to the county.—*Salt Lake City Tribune*.

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Coyotes Are Hunters . . .

TONOPAH—Coyotes, like human hunters, hunt game "just for the fun of it," according to Nye county observers. Three or four will get together and start hunting. During the chase they indulge in all sorts of playful antics. If their quarry gets away they merely lie down and rest, and apparently joke about it among themselves. Deer losses to coyotes, it was said, far exceed the "take" of mountain lions who are considered responsible for the death of one deer per adult lion per week.—*Tonopah Times-Bonanza*.

He Saw Goldfield Start . . .

GOLDFIELD—When Butch Bromm came to Goldfield in 1903, he camped at Rabbit springs. Billy Marsh and Harry Simler had just made their strike at the Sandstorm, and there were only three tents in sight. "The camp didn't even have a name as far as I knew," Bromm said. "Later, I guess, they called it Grandpa and finally changed it to Goldfield." Bromm settled permanently in Goldfield in 1907 and worked at various mines. Celebrating his 74th birthday in September, he declared that stories of the camp's wildness in the early days are greatly exaggerated. There were few shootings and little rough stuff—for a boom camp.—*Goldfield News*.

Death Valley Scotty celebrated his 76th birthday at the Castle on September 20, protesting that he didn't like birthdays because they made a man feel too darned old.

NEW MEXICO

Boundary Survey Advances . . .

AZTEC—A 20-year project clarifying the New Mexico-Colorado state boundary is nearing completion, according to Arthur D. Kidder, commissioner for the United States supreme court. Kidder has been in charge of the boundary resurvey since it began in 1928, after the supreme court ruled the boundary should be the line

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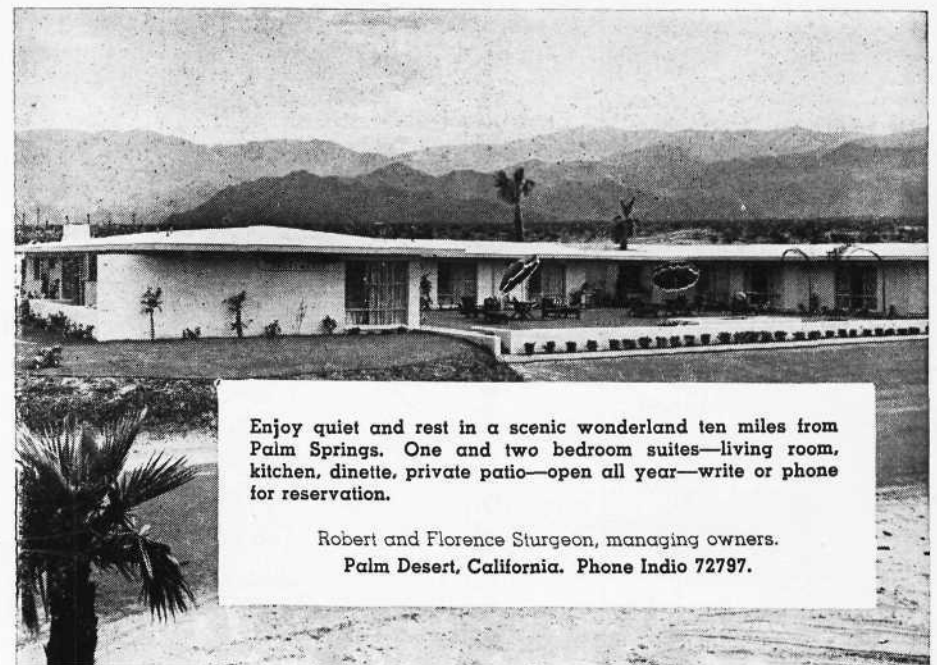
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established in 1868. Merely finding the 1868 line was a big job, but more than three-fourths of the boundary has been re-surveyed with less than 60 miles remaining. Kidder reports his group should reach the Animas river soon, and that the survey should be completed next summer.—*Gallup Independent*.

Atomic Cattle . . .

ALAMOGORDO—When the first atomic bomb was exploded in New Mexico, a herd of cattle which had been overlooked when the area was cleared was within range of the blast. The cattle were miles away where hills protected them from the flash of heat and radioactivity. But radioactive desert dust drifted over the herd and a light rain brought the material down upon them. The cattle were discovered and placed under observation. After a few days, the hair on their backs turned white in long bands and most of it dropped out. That which grew in later was grey rather than red. The herd is now at the University of Tennessee where long range study is being made.—*Gallup Independent*.

Basin Compact Signed . . .

SANTA FE—Signing of the upper Colorado river basin compact in the Palace of the Governors in Santa Fe, October 11, was hailed by interior department officials as marking a "new epoch of national importance in reclamation advancement." The compact must be approved by the legislatures of New Mexico, Utah, Arizona, Colorado and Wyoming and by congress. Final agreement was delayed while Utah and Wyoming battled over storage of Green river

waters. Under the proposal, Arizona will receive 50,000 acre-feet annually and the remaining 7,500,000 acre feet allotted the upper basin states will go 51.75 per cent to Colorado, 11.25 per cent to New Mexico, 23 per cent to Utah, and 14 per cent to Wyoming.—*Salt Lake City Tribune*.

Indian Vote Trouble . . .

TAOS—Governor Antonio Mirabel of the Taos Indian Pueblo resigned in September as a result of criticism of his attitude on the Indian vote, and Manuel Lujan was elected as governor by the opposition group. Mirabel reportedly had said: "Since the decision has been made in the courts that the Indians may vote, the Indians should vote." The new governor, however, declared: "Taos Indians flatly protest accepting the vote. We have been getting along nicely from generation to generation until this thing of registering and voting came our way." The All-Pueblo council placed its official approval on voting by approximately 7000 New Mexico Pueblo Indians, it was said.—*Taos El Crepusculo*.

Alamos Votes Disqualified . . .

SANTA FE—New Mexico supreme court has disqualified all votes cast at the Los Alamos atomic energy project in a recent primary election. The court found that since all polling places in the primary election were located on lands acquired by condemnation, all votes are invalid. The United States, it said, holds complete and exclusive jurisdiction over these areas and the areas are not a part of New Mexico for voting purposes.—*Santa Fe New Mexican*.

Apaches Go to Court . . .

DULCE—The Jicarilla Apache tribal council has authorized the general counsel of the National Congress of American Indians, James E. Curry, to include the tribe as plaintiff in the pending suit in Washington to establish the right of Indians to receive the benefits of the Social Security laws. The suit, filed for individual Indians, is pending in the district court of the United States for the District of Columbia against Interior Secretary Krug and Federal Security Administrator Oscar Ewing.—*Gallup Independent*.

Hubbells Celebrate . . .

ALBUQUERQUE—The centennial of the arrival of James L. Hubbell in New Mexico was to be celebrated with a family reunion in Albuquerque, September 26-27, with Hubbells from New Mexico, Arizona and California planning to be present. The first James Hubbell, arriving in 1848, became sheriff of Valencia county, cattle buyer and freighter. His brother, Sidney, followed him and became first district judge from the Albuquerque district. The Arizona branch of the family was established by Juan Lorenzo Hubbell who moved into the Ganado area in 1873 to found a ranch and trading post.—*Gallup Independent*.

"Cowboy" Lemley, Las Cruces dealer in gems and minerals, antiques and curios, died September 19, and his wife is carrying on his enterprises.

UTAH

Arches National Park? . . .

MOAB—The Moab Lions club, dissatisfied with the appropriations made by the national park service for improving and maintaining facilities at Arches national monument, has voted to sponsor a bill in congress advancing the Arches area to the status of a national park. Plans for improvement of the Arches, it was said, are no closer to reality now than they were 10 years ago. It was suggested that Fisher Towers and Dead Horse Point be included in the proposed park. Travel to the monument during the last year almost has doubled.—*Moab Times-Independent*.

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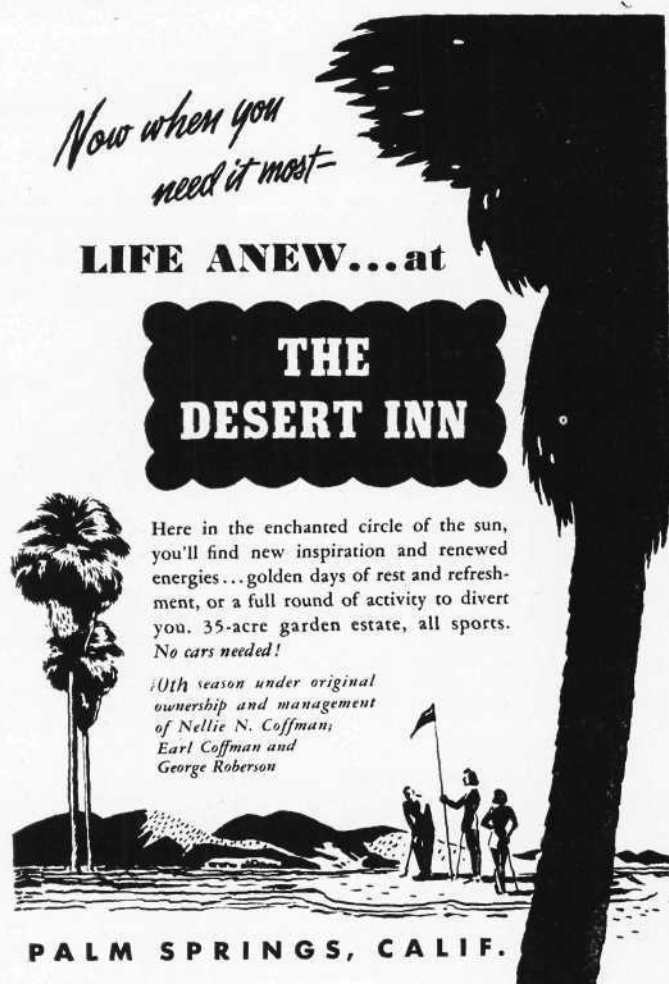
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PALM SPRINGS, CALIF.



TRUE OR FALSE ANSWERS

Questions are on page 10

- 1—False. Billy the Kid was a New Mexico outlaw.
- 2—True.
- 3—False. The Mojave disappears in a series of lakes which, like the lower river generally are dry.
- 4—False. Capt. Cooke led the Mormon Battalion.
- 5—False. Chains may help when the car is rolling, but when it stops they are inclined to dig in deeper.
- 6—False. Ocotillo belongs to the Candlewood family.
- 7—True. 8—True.
- 9—False. The Butterfield stations were not built until after 1855.
- 10—True. 11—True.
- 12—False. The name derives from the twisted bean.
- 13—True. 14—True.
- 15—False. The Saguaro generally is taller than Organ Pipe.
- 16—False. 17—False. 18—True.
- 19—False. Chief Winnemucca was a Paiute.
- 20—True.

Utes Win Again . . .

VERNAL—Five years after its first decision, the court of claims in Washington has held for a second time that the government must pay the Ute Indians for approximately five million acres of land along the Utah-Colorado border. The Indians are suing to establish the value of the lands which they claim were finally taken over by the government in 1938. Ernest L. Wilkinson, an attorney for the tribe, declared that \$2 an acre will be asked for surface rights, while the value of mineral rights will be established separately. The Colorado Rangely oil field is included in the area. —*Gallup Independent.*

Find Warm Springs . . .

VERNAL—With the Green river at its lowest level in seven years, Arthur Larsen, hydraulics engineer, reports that conditions are unusually good for studying strata and ground water conditions below the normal water level. Included in discoveries made during a U. S. geological survey boat trip from Linwood, Daggett county, to Jensen, was the fact that there are warm springs in Split Mountain canyon, six miles above Dinosaur national monument. Temperature of the springs indicated they came from 1000 feet or more down. Rubber boats were used on the trip because of the extremely low water level. —*Vernal Express.*

Meteorite Made Soft Landing . . .

SALT LAKE CITY—The Smithsonian institution of Washington is trying to figure out how the 1164-pound meteorite found in Millard county in 1944 could have struck the earth with so little damage to itself and the spot where it hit. They figure that the sky visitor, eighth largest discovered in this country, must have hit the earth with a force of at least 20,000,000 foot pounds. But there was no crater where it was found and the meteorite shows no signs of hitting anything hard. The only explanation advanced is that it might have landed in deep snow or sand. —*Salt Lake City Tribune.*

Ocean to the Desert? . . .

SALT LAKE CITY—Governor Herbert B. Maw hasn't received the letter which the Ocean Water committee of San Diego reportedly has sent to the governors of Nevada, Arizona, New Mexico, Colorado, Utah and California, inviting them to help themselves to ocean water. But he says he is in favor of any plan that will get water on the desert. The San Diego committee proposes conversion of sea water to fresh for domestic and agricultural purposes. Under the plan gravity flow would take Gulf of California water to a desert processing plant to be operated by wind and solar heat. —*Salt Lake City Tribune.*

Field House Opened . . .

VERNAL—Dedication and official opening of the Utah Field House of Natural History was set for October 29, according to G. E. Untermann, director. The \$200,000 structure will house displays of geological, plant and animal life found in the Uintah basin. A series of 50 oil paintings depicting prehistoric life in the basin, as reconstructed from fossils, has been donated by the artist, Ernest Untermann, as have scenic paintings of Utah by Arno A. Steinicke. —*Vernal Express.*

The 117 degree maximum temperature shown at Yuma on September 2 was the highest September reading in the 70-year history of the weather bureau station.

Housing Must Be Short . . .

OGDEN—Two men, apparently trying to beat the housing shortage, occupied the Miles Goodyear cabin in Tabernacle park for several days before being discovered and evicted. The cabin, oldest structure erected by whites in Utah, was placed in the park by the Daughters of Utah Pioneers. —*San Juan Record.*

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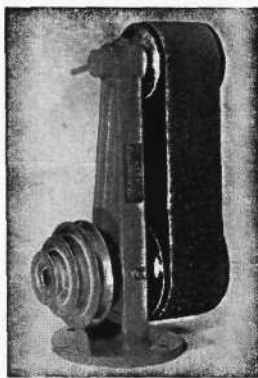
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By LELANDE QUICK, Editor of The Lapidary Journal

The following letter from Charles F. Emerick of Clairton, Pennsylvania, recalls our letter to Nellie Glover published in the April, 1946, *Desert*. In that letter we offered what we believe to be the most concise and easily understood story of how gem cutting is accomplished that has been printed. Since that time we have established a magazine about it and Dr. Daniel Willems has written a book, *Gem Cutting* (available from Desert Crafts Shop). But the *Lapidary Journal* and the Willems book simply enlarge on the Nellie Glover letter. We consider it our best column on gem cutting. But here is Mr. Emerick's letter:

"Just a moment ago I laid aside the September issue of *Desert*, went down to the basement, threw a few shovels of coal into the furnace, walked over by my workbench and looked at the grinding wheel, came back upstairs and looked out at the rain, picked up *Desert* again and saw your name and here goes—

"My wife and I took the month of September for a vacation. It was our first trip west and we both enjoyed it very much. What fascinated me more than anything else was the rocks, minerals and like matter with which the country abounds. I didn't pick any raw material myself but I would have liked to. One look at that rugged country and I knew that the clothing and shoes I had were not for roaming around the desert. We did spend some time in the shops that feature rocks, minerals, cut stones, etc. I guess I got bit because I bought a few pieces of petrified wood, expecting to have my friends oh-ing and ah-ing when I got them polished. I also bought *Desert Magazine* as I saw ads for stones, etc., and had plans to spend a happy winter grinding away. Well, I have ground for three evenings now and that rock just won't polish. In fact it wears down my emery wheel faster than the petrified wood. I was all set to toss it into the ash can but thought you might enlighten me as to the process. I am so dumb about it that I thought the 'good cutting material from Nevada' mentioned in the Gem Mart section was some kind of a powder used to cut the stone.

"So if I may impose on your kindness, and drag you away from your own rocks, would you send me some idea as to where I can get information as to what is used to grind the stuff. I know it is not too hard a task as the price of the polished material isn't so high that it would take much time. I can buy the polished stones without any trouble but would like to do my own. But most of all I sure would like to know what is used to cut that !?!?! petrified wood.

"We have none of the stones and minerals such as you have in the West. We do have

coal and limestone that will in some cases show a trace of fern that is interesting. Around the sites of old Indian villages we find bits of flint left by the arrow-head makers but it has been picked over until there is nothing left. One of the most amusing things in your West was the rocks on the side of a mountain painted green by some joker to get some guy like me to crawl up to get a nice sample of ore. I bit once."

Now the Nellie Glover letter was the satisfactory answer to this correspondent, as it is to anyone who asks, "How do you do this gem cutting?" We had a thousand copies of the April, 1946, column run off the press at that time. We shall be glad to send one of the few remaining copies to anyone requesting it if they will send a self-addressed stamped envelope.

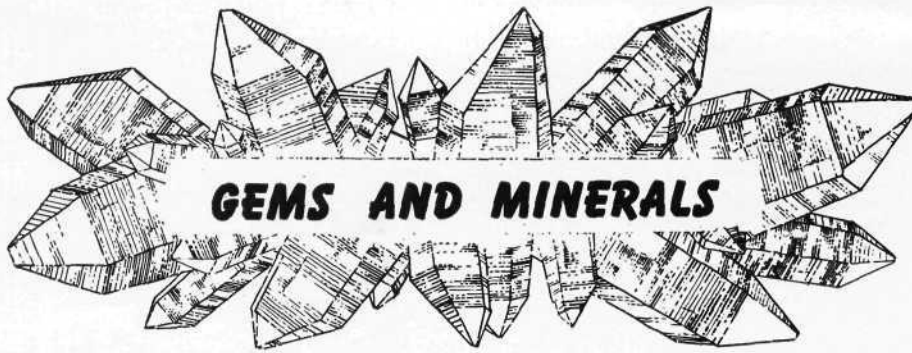
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And now if the western readers, particularly, are through smiling at Mr. Emerick's confessed dumbness we respectfully call your attention to the appalling ignorance of many western mineral collectors and gem cutters about the rocks familiar to Mr. Emerick. Many do not know that without the coal and limestone he speaks of there would be no steel industry in Pennsylvania. They do not know that while the West abounds in iron deposits, comparatively little steel is made here because we do not have enough coal and limestone for the blast furnaces. And few of the tens of thousands of mineral collections in the West contain a piece of one of the most common and most useful minerals in the world—coal!

When we were at the Denver mineral convention last June we tried to persuade a California dealer to bring back a hundred pounds of coal and sell it as mineral specimens. He couldn't see the wisdom of the idea and did nothing about it. However, thousands upon thousands of California school children of high school age have never in their lives looked upon a piece of coal, and few mineral collections contain a specimen. Sometime some smart easterner is going to offer fine specimens of coal for a quarter postpaid. He will have hundreds of orders from the West to fill.

As a native of Pennsylvania, we remember coal. We recall the fascination of finding a fossil fern in the coal bin. We well remember the first mineral carving we ever saw, the Black Diamond Express of the Lehigh Valley railroad done with a shiny block of coal. A mineral collection without a piece of coal is like celery without salt. Guess we'll have to get a piece.

This page of *Desert Magazine* is for those who have, or aspire to have, their own gem cutting and polishing equipment. Leland Quick, who edits "The Lapidary Journal," will be glad to answer all questions in connection with your lapidary work. And he would like details about new short cuts or devices which lapidary workers have discovered, to pass on to readers. Queries and information should be addressed to *Desert Magazine*, Palm Desert, California.



GEMS AND MINERALS

LARGE ATTENDANCE AT SAN DIEGO EXHIBIT

San Diego Mineral and Gem Society, Inc., held its 11th annual show in Balboa park October 16-17, with 6085 visitors tabulated. During Sunday, an average of 438 visitors an hour were checked through the main entrance. Members of the society set up a lapidary shop in the Federal building, and those attending were able to see the operations of lapping, sanding, jewelry making and sawing. Along the opposite wall were displays illustrating historical geology, structural geology, petrography, methods of prospecting, claim filing and mineral identification, and demonstrations of phosphorescence and fluorescence.

The society printed an eight-page program for the show, with a plan of the exhibit and locations of the exhibitors shown on the front page. Included in the program were articles on kunzite, faceting, rockhounding, and the history and activities of the society.

• • •

PRESCOTT SOCIETY SHOW SET FOR NOVEMBER 27-28

Annual rock show of the Yavapai Gem and Mineral society of Prescott will be held November 27-28 in the display room of the Arizona Power corporation in Prescott. October 5 meeting of the society was held at the Hassayampa hotel, with a rock auction as the feature of the evening. E. E. Michael was auctioneer. Jack Streeter, vice-president of the American Federation of Mineralogical societies was a special guest. Streeter displayed a collection of crystals and issued an invitation for the club to attend the federation's convention in Sacramento in June, 1949.

Dr. H. H. Nininger, director of the American Meteorite museum, located near Meteor crater, Arizona, will be the special speaker at the regular meeting of the society, December 7. James H. Shelton spoke to the society at its September meeting on "Minerals in Modern Pharmacy." It has been decided to hold the regular monthly meetings on the first Tuesday of the month.

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George H. Marcher, graduate member of the American Gem society, lectured on the grinding and polishing of cabochons at the October 14 meeting of the San Fernando Valley Mineral and Gem society. He explained that many gem stones have their beauty destroyed by being set too high or too low in their mountings. Many new members have been added to the club as the result of the recent annual show. The society planned two field trips for October. The first, to the Nuevo district for star quartz, was attended by 98 persons. The second trip will be to Randsburg for fluorescent material.

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E. Beaumont, Bay City, Michigan

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GEIGER COUNTER POPULAR AT SACRAMENTO EXHIBIT

The Sacramento Mineral society held its sixth annual exhibit at the Clunie Memorial clubhouse, October 16-17. There were exhibits by society lapidaries, and junior members, and displays of minerals and crystals. The Geiger counter, demonstrated by M. K. Raymond, and a large group of radioactive minerals were centers of attraction. In addition to the usual features there was a shadow box, mining panorama and a very early map of California. H. T. Goode furnished a musical background on an electric organ.

October meeting of the society was to be held in the Clunie clubhouse October 22, with a talk on diamonds by Jack Favre of Sacramento planned as a feature. The club president, G. R. MacClanahan, was to speak on: "Gem Minerals in Lapidary Theory and Practice."

AMONG THE ROCK HUNTERS

The Orange Belt Mineralogical society held its first meeting of the fall season at San Bernardino Valley college, October 5. Frederick Gros, instructor of mineralogy and geology at the college, showed colored slides of the Harvard university collection of minerals.

Warren Jones of the Sierra Mineral Specialties company told the September meeting of the Glendale Lapidary and Gem society of his trip over the Pan American highway into South America by jeep.

Helen Pratt, secretary, reports that the Victor Valley Mineral club of Victorville, California, has a rapidly increasing membership list. The group's fluorescent display at the San Bernardino county fair at Victorville won the grand prize. The society wishes to thank the many mineral and gem clubs of San Bernardino county which contributed to the colorful exhibits in the mineralogical tent at the fair. The society can be contacted through Box 561, Victorville.

Officers for 1948-49 were elected at the regular meeting of The Coachella Valley Mineral society, held at eight p. m., October 13, in the auditorium of the Coachella Valley county water district. Charlene Vargas is the new president; Dr. Harold Wm. Wood, vice-president; Leah Hambly, secretary-treasurer; and Jessie Hamner, assistant secretary-treasurer. Retiring officers are: O. A. Rush, president; Ted Gentry, vice-president; and Dedrick Wilson, secretary-treasurer. The club, which also sponsors the Junior Rockhound club of Indio, meets the second Tuesday of each month, and visitors are welcome. The group has just issued the first number of its bulletin, *Lick 'n Lap*, with Crystal I. Zation listed as editor.

The Tacoma Agate club planned to observe its eighth birthday with a dinner at Fruitland Grange, near the city. There are now more than 100 members of the club, which is affiliated with the Northwest Federation. This year, under the leadership of Nels Olsen, the club has made regular trips to Madigan general hospital with displays to entertain the servicemen there. During April and May a display of Washington ma-

terial was exhibited at the state historical society museum. The Tacoma club was host to other mineral clubs of the region at the annual picnic at Sweetwater state park, with a registered attendance of 160.

W. Scott Lewis entertained the Pacific Mineral society at its October meeting with a lecture, "Hidden Beauties of the Mineral World." Lewis, who is a member of the American Association for the Advancement of Science, Mineralogical Society of America and Southern California Academy of Sciences, illustrated the lecture with Kodachrome slides which were projected by Mrs. Lewis. Educational exhibit for the meeting was a group of pegmatite minerals from Toll Mountain, Butte, Montana, from the collection of Club President James F. Underwood. Also on exhibit were several early first edition mineral books from the library of Mrs. A. E. Allard. Field trip of the month, under direction of John A. Jones, was to the mineral show at Trona.

Langdon Longwell, former president of the Marquette Geologists association, was the speaker planned for the October 9 meeting of the Chicago Rocks and Minerals society, his topic "Agates." Election of officers was scheduled for the same meeting.

October meeting of the Oklahoma Mineral and Gem society was to feature a film, "Earth's Rocky Crust," to be shown by Linton T. Riggs. At the September meeting, Mrs. H. T. Daniels talked about the rocks and minerals of Kansas. Using a large map, she discussed locations of various minerals in the state and gave statistics on its mineral wealth.

Orsino C. Smith, author of *Mineral Identification Simplified*, was guest speaker at the October meeting of the Santa Monica Gemological society, demonstrating and explaining methods of identifying rocks, particularly metallic minerals. October field trip included a visit to the Searles Lake Gem and Mineral society show.

The final field trip of the 1948 season for members of the Minnesota Mineral club of Minneapolis was scheduled for October 10. The place was the Milwaukee railroad gravel pit on U. S. 61, two miles southeast of Reeds Landing and one mile northwest of Wabasha. First fall meeting of the society was scheduled for the Curtis hotel, November 13.

Canon City Geology club of Canon City, Colorado, in a joint meeting with the Columbine Gem and Mineral club of Salida, visited the old Bull Domingo mine at Silvercliffe, September 27. Mr. Lecock, superintendent of the mine, conducted the tour and showed visitors his collection of crystals, giving each visitor a specimen before they left his office. Don Flaherty led the group to the Shirley ranch on the east slope of the Sangre de Cristo range at the foot of Mount Gibson. The ranch was decorated with wood carvings and taxidermy produced by Mr. Shirley during the winter evenings.

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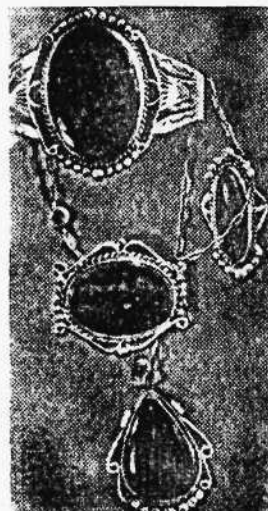
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YACHATS ROCKHOUNDS FORM NEW MINERAL SOCIETY

Rockhounds of Yachats, Oregon, recently organized the Yachats Gem and Mineral club. Mr. Smiley is temporary chairman, and Mrs. Harvey Cole, Box 150, Yachats, Oregon, is secretary-treasurer. Members of the group would like to trade material with rockhounds in other districts. They offer beach agates, jaspers, woods, sagenite and water agates.

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At the October meeting of the Pomona Valley mineral club, Geneva Dow spoke on "Handcraft Stone Setting, Piercing, and Smithing in Various Mediums." Her display included tools used in smithing, many completed pieces of jewelry, novelty items constructed of silver, gold, aluminum, copper, plastic and celluloid, and books on the construction of metalcraft objects.

E. P. Matteson talked on chrysocolla at the August meeting of the Maricopa Lapidary society of Phoenix, and explained the various shapes used for cabochons. At the September meeting, Mr. Young lectured about pegmatite dikes. Membership in the club has reached 72. Meetings are held the second Monday of each month at 1736 W. Van Buren street, Phoenix, and visiting rockhounds can contact Dr. Robert Solosth at 3-7725 and 5-1217.

Virgil Wall of Animas City showed films taken during his stay in the Aleutian islands at the September 15 meeting of the Four Corners Rock club of Durango, Colorado. Bill Little of Hesperus set up his fluorescent lamps and a fluorescent display was held.

Nebraska Mineralogy and Gem club of Omaha, Nebraska, and Council Bluffs, Iowa, held its first fall meeting September 22 at Joslyn Memorial in Omaha, with the newly elected officers presiding. Mrs. Bertha C. Minardi is president; E. R. Long, vice-president; and Carl D. Hutchens, 9 N. 21st St., Council Bluffs, Iowa, secretary-treasurer.

George Parker was speaker of the evening at the September meeting of the Hollywood Lapidary society, September 9. Parker talked about unusual gems and displayed a collection of jewelry. September field trip was to Horse Canyon.

Officers of the Colorado Mineral society, Denver, Colorado, are: Richard M. Pearl, president; Ray W. Thaler, first vice-president; Chester R. Howard, second vice-president; Mrs. C. W. Hayward, secretary-treasurer; Mrs. Mignon W. Pearl, corresponding secretary, 1130 Wood avenue, Colorado Springs, Colorado. Pearl also is president of the American Federation of Mineralogical societies, and Chester R. Howard treasurer of that organization.

Vera and Harold Hofer, editors of *Mineral Minutes*, bulletin of the Colorado Mineral society, will welcome an exchange of publications with other mineral societies. Address the editors at 3276 Raleigh, Denver 12, Colorado.

Ralph L. Carr, born in the old mining camp of Cripple Creek, twice governor of Colorado and present regent of the University of Colorado, was to be the speaker at the October meeting of the Colorado Mineral society.

Dr. George Green of San Francisco college was to be featured speaker at the October 20 meeting of the Northern California Mineral society in the San Francisco public library. "Geology Around San Francisco" was to be his topic. Field trip of the month was to the Berkeley hills for nodules. Club President Charles Hansen has agreed to teach a course in mineral identification, with classes to be held every other Monday at 8 p. m. at 1001 Oak Street. Harold Newman is instructing lapidary classes on Tuesday evenings and Naomi Long, Thursday evenings.

CHAIRMEN ANNOUNCED FOR 1949 ROCKY MOUNTAIN SHOW

The *Mineral and Gem News of the Rocky Mountains*, official bulletin of the Rocky Mountain Federation of Mineral societies, announces the chairmen for the 1949 Rocky Mountain convention, which will be held in Albuquerque, April 21-23, 1949. The convention will be staged at the Knights of Columbus hall, 609 S. 14th St. Mrs. Ollie Evans, 220 1/2 S. Edith, is convention chairman and Mrs. Lois K. Heister is assistant chairman. A. H. Gunnell is in charge of exhibits and floor space; W. V. Gilpin, auction; Wm. Parker, prizes; Mrs. Leona Gilberts, concessions; H. W. Kelsen, specimens; Mrs. Olive Bell, favors; Mrs. Viola Murphy, social chairman; Mrs. Bessie Paradis, hostess; D. F. Blankley, field trips; Ben Boddy, local tours and transportation; and Louis W. Heister, publicity.

Albuquerque Gem and Mineral society had a large display at the 1948 New Mexico state fair. Club members Gilpin, Murphy and Venn arranged lighting for the exhibit.

For the October 5 meeting of the Sequoia Mineral society, an open house at the new Parlier adult evening lapidary class was held. At the meeting in Reedley, September 11, Bill Dyck, Mrs. Johnstone, Mr. and Mrs. Dickey, Mr. and Mrs. Gates Burrell, and Dr. Wallace reported on summer vacation trips.

November meeting of the San Jose Lapidary society was to be held at the De Anza hotel, with a round-table discussion on lapidary technique tentatively scheduled. Francis J. Sperisen of San Francisco was to be the speaker at the October meetings, describing gem stones, their characteristics, inclusions and other properties.

First meeting of the new season for the Mineralogy Society of Utah was to be held October 5 at the geology building of the University of Utah, Salt Lake City. Business of the meeting was to consist of reports on the convention trip and summer field trips for agate, variscite, woods and bones.

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LELANDE QUICK, Editor and Manager

PRESCOTT JUNIOR GROUP SHOW IS POPULAR

Second annual show of the Junior Rockhounds of Prescott, held September 4-5 in the display room of the Arizona Power corporation, was attended by 400 visitors from Arizona and 11 other states. In a broadcast over KYCA, John Butcher, Larry Bender, Chip Murdock, Pete Murdock, Nancy Merwin and Anne Pessin told the story of the junior group. A series of special programs were given at the show with John Franks telling the educational value of the club, Don Sheldon describing the mineral wealth of Arizona, Judge G. W. Fryer outlining prospecting and the career of mining engineer, and Homer Wood talking about the rockhound organization and the abilities the group was developing. Just before the show opened, the Junior Rockhounds held a party to celebrate their second birthday.

At the October 15 meeting, held at 331 Park avenue, Bruce Mallin talked on "Meteorites." Thirty-five members and friends attended, and minerals for the Arizona state fair at Phoenix, November 5-14, were brought. The exhibit will be under the name of the Prescott schools.

Searles Lake Gem and Mineral society held its annual mineral show October 23-24 at Trona. Field trips were held for the benefit of visiting rockhounds, including one to Searles lake for the minerals. Sam Houston, ranger in Death Valley monument, was to be principal speaker at the November meeting of the society, with the subject: "You and Your National Parks and Monuments." At the meeting just before the show, Floyd Keller, also from Death Valley national monument, was to present an illustrated talk on the Petrified Forest national monument.

George Higson was to be in charge of the October 21 meeting of the East Bay Mineral society, Inc., of Oakland, California, and planned a talk on "Lapidary Arts." In addition to the talk, he was to conduct practical cutting and polishing demonstrations. At the October 7 meeting, Dr. C. W. Chesterman of the California state division of mines was to speak on "Volcanology" with particular emphasis on the nature of the Japanese volcanos. October field trip was planned to the Guadalupe quicksilver mine. September field trip was to Onyx Springs back of Fairfield. On September 10, the club celebrated its 10th anniversary.

At the September meeting of the Southwest Mineralogists, Jim Underwood described the minerals of the Butte, Montana, area, giving facts and figures on "the richest little hill on earth." He displayed a collection of copper minerals. Mr. Akers spoke on the tungsten ores from the great mine in the Andes of Peru. The club vice-president, Frank Trombatore, displayed a coral tree on a lava formation and told how it was snagged in deep water while he was on a fishing trip off Baja California. Twenty-four members of the society visited Tick canyon in September to collect howlite, ulexite, and colemanite from the old Pacific Coast Borax company mine there. Connie Trombatore, 338 Pomelo avenue, Monterey Park, California, is corresponding secretary for the society.

President Blanchard arranged with Thomas J. Goff of San Diego to display fluorescent paintings and to tell about them at the October meeting of the Kern County Mineral society, held in Bakersfield.

September meeting of the Monterey Bay Mineral society was highlighted by a potluck dinner, followed by installation of new officers as follows: Dr. A. C. Blaylock, president; Dr. A. C. Mitchell, vice-president; Mrs. Pauline Braun, 618 Sanborn Road, Salinas, California, secretary; Norman Harmer, treasurer; A. W. Flippin, adviser; G. H. Nelson, California Federation director; V. L. Fraser, H. W. Powers, D. E. Perry, directors.

Maxine Henderson was guest speaker at the October 7 meeting of the Mojave Gem and Mineral society, meeting in Barstow. She talked about first aid, with emphasis on treatment for accidents most likely to occur on field trips. A trip to Afton canyon was planned for October 17.

Plans for field trips for the remaining months of 1948 were made at a directors' meeting of the San Geronio Mineral and Gem society, October 13 at the home of Mr. and Mrs. Paul Lockwood.

Georgia Mineral society of Atlanta planned its October field trip to collect and study fossils and minerals around Rome in Floyd county. Dan Arden, Jr., was to lead the group. On Labor day, the club members made their second official night field trip, visiting two quarries in the vicinity of Stone mountain to collect hyalite, a variety of opal which fluoresces under ultra-violet rays.

Indio, California, Junior Rockhounds made their first field trip of the fall season October 16. Accompanied by five adults, the 31 juniors prospected the mountains east of Desert Beach on the Salton Sea. Don Stanfield, junior rockhound president, and O. A. Rush, senior club advisor, led the group.

One of the outstanding bulletins among those published by mineral societies in the United States, the September, 1948, *Newsletter* of the Georgia Mineral society of Atlanta, contains 26 mimeographed pages with inserted illustrations. Besides club and gem news and the society constitution, there are excellent articles on collecting areas in the South, natural attractions of interest to mineralogists, the geology of Stone mountain, Georgia, and on gems and minerals.

One of the problems assigned to the bureau of mines during the war years, according to C. T. Baroch of the Boulder City, Nevada, office, was that of finding a substitute for nickel in the five-cent piece. Weight and resistivity had to be considered because of the large number of coin operated machines in use. Finally it was found that a mixture of nine parts of manganese, 35 parts of silver and 56 parts of copper would serve the purpose. All five-cent pieces bearing the large mint marks are of the new alloy, Baroch told the Mineralogical Society of Southern Nevada recently.

October meeting of the Dona Ana County Rockhound club of New Mexico was held at the A. K. Foster home. It was a business meeting with plans proposed for the club's Rockhound booth at the Cotton Carnival in Las Cruces. October 29, the group planned a joint meeting with the El Paso Mineral and Gem society in Texas. Organized and private field trips were occupying most of the society members' weekends.

"The Meaning of the History of Fossils," was to be the topic of Dr. Hoyt Rodney Gale, geology department, Pasadena City college, at the October meeting of the Mineralogical Society of Southern California. The meeting was planned for the lecture room of the Pasadena public library. Dr. Gale, an authority on California fossils, was to present ideas he had developed in studying the life of the past. October field trip was to be made to the mineral show of the Searles Lake Gem and Mineral society at Trona. All communications to the Mineralogical Society of Southern California should be addressed to Mrs. Victor J. Robbins, 928 E. Hellman avenue, Monterey Park, California.

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By RANDALL HENDERSON

WE'LL miss Marshal South. He was a dreamer—an impractical visionary according to the standards of our time, but what a drab world this would be without the dreamers. Marshal's tragedy was that he tried too hard to fulfill his dream. He would not compromise. And that is fatal in a civilization where life is a never-ending compromise between the things we would like to do and the obligations imposed by the social and economic organization of which we are a part.

Marshal wanted to live a natural life, and so he moved out to Ghost Mountain to be as close to Nature as possible. If he had been a hermit that would have worked very well. But Marshal was not a hermit by nature. He wanted to raise a family—and impose upon his family his own unconventional way of life.

Therein lay the weakness of his philosophy. He despised the rules and taboos of the society he had left behind, and immediately set up a new and even more restrictive code for his own household. And therein lies the explanation of the break in the South family life which a few months ago was so disillusioning to a great many of Desert's readers.

But none of us is perfect. Marshal's magazine stories were popular because of the beautiful prose with which he expressed the dreams which are more or less in the hearts of all imaginative people. Those of us who knew him well, felt for him the respect that is always due a man with the courage of his convictions.

We'll miss his stories of the desert trails. We will remember him for the artistry with which he expressed ideals we all share.

At the Desert Magazine office we receive many hundreds of newspapers from all over the Southwest, and it is gratifying to note the amount of space being given to matters of soil conservation. At a time when crops are good and food is as plentiful as it is in the United States today we are inclined to ignore the warnings of scientific men who tell us that through erosion and bad management we Americans already have squandered one-third of our original soil resources, and that if population continues to increase while our good earth is being destroyed there will come a day when we will have a food problem similar to that in Europe and Asia.

There just isn't enough food in the world to go around today, and if we are to accept the authority of men who study such matters, the situation will get worse rather than better, due to high rate of increase in population. Sooner or later we must face the alternatives: reduction by war and famine, or reduction by birth control.

Desert's new publishing plant and art gallery are now open to all readers and friends who come this way. Many

hundreds of guests thronged the building during the official open house days in mid-October, and we were pleased to have them as our guests. We plan to keep the doors open weekends so visitors will have access at all times.

The second day of our open house program it rained—one of those gentle showers which seep into the desert sands and bring life to the seeds which have remained dormant for months or perhaps years.

But folks came to see us in spite of the rain. Our halls were filled with the scent of moist greasewood or creosote—and that is perfume to old-timers on the desert. Newcomers often find it objectionable at first, but when they have become attached to their desert homes and have learned the value of water on the desert their prejudice disappears. For the scent of the creosote pervades the air only when it rains.

Perhaps some of the initial dislike for greasewood derives from its name. Greasewood is not an inviting word, and creosote suggests a bad odor. It is not an accurate term. The Spaniards called it *hediondilla*. It is a pretty word as the Mexicans pronounce it and I wish it could be adopted into the English language—despite the fact that it has a rather uncomplimentary meaning in Spanish. The first Spaniards who came to the Southwest did not like the smell of greasewood any better than do the tenderfeet of today. One has to live in the land of creosote a few years to acquire a liking for its fragrance.

There will always be elections in America we hope—and there will always be winners and losers. Perhaps on the day after the November election there were hearts heavy with disappointment. I wish the defeated candidates and those who shared their aspirations for high political honor might have stood with me on the floor of my desert cove at the foot of the Santa Rosas as the sun came up on the morning of November 3.

Those rugged mountains have been there for a million years. The snow on their summits has been giving life to the things that live and grow in the canyons below for countless ages. The sun coming over the mountain top in a halo of crimson and azure was giving warmth and energy to living things on this earth eons before man emerged.

Those are the important things of our life—the soil, the rain and the sun. And no president can add or detract from them. We humans play a very minor role in the Great Plan of the universe. It is well to have faith and work energetically for the things we believe to be right. But there is always the possibility that we may be wrong. And after all, it is the courage and beauty and understanding in the heart of each individual—and not the president of the United States—that determines the fullness of each life.



ED AINSWORTH TELLS OF CALIFORNIA ADVENTURING

In CALIFORNIA JUBILEE, Ed Ainsworth writes of the things he knows in the easy, familiar style of his newspaper work for the *Los Angeles Times*, and that is the reason it is his most readable book to date. He tells of the odd places where his newspaper assignments and his own interests have taken him, and of desert venturing with John Hilton. There are stories of the giant sloth's cave above Pierce's Ferry on the Colorado river, of calcite mining on the desert during the war, of Imperial and Coachella valleys and the Salton sea, of Searles lake and the mining operations at Trona. The chapter called The Mad Mummy tells of the finding of the renegade Indian Queho's mummified body, and of the complications which followed.

Possibly the most interesting section, for Ainsworth fans, is that which describes the founding of the Ainsworth-Quay House newspaper at Coachella, *The Desert Barnacle*. The larger portion of the book deals with experiences outside the desert area: Capistrano, Huntington Library, Monterey, excavations at Buena Vista lake, the Mother Lode, California condor country, and the trials and tribulations of newspaper work as the *Times* "Country Editor."

Ainsworth is a newspaperman in the tradition of John Stevens McGroarty, Harry Carr and Max Miller, although his humor runs to somewhat broader lines. And his CALIFORNIA JUBILEE is interesting and entertaining material on the California back country and the West.

Murray & Gee, Inc., Culver City, California, 1948. 272 pps. \$3.00.

SIDELIGHTS ON THE STORY OF FABULOUS NEW MEXICO

From Inscription Rock to Los Alamos, from Billy the Kid to the Gallup Ceremonial, THIS IS NEW MEXICO gives 49 intensely interesting vignettes of that fabulous state. Selected by George Fitzpatrick, editor of the *New Mexico Magazine*, from the articles appearing in that publication for the past dozen years, the collection is divided into sections: Glimpses of History, Horses and Men, This Sun-Loved Land, the Unforgettable Past, Accent on Outdoors, Art and Architecture, From Teacups to Timberline, Indians, Folkways, A Few Towns, and the Atomic Age.

The authors of THIS IS NEW MEXICO know their subjects. They include many of the best known Southwestern writers such as J. Frank Dobie, Ross Calvin, Eugene Cunningham, Harvey Fergusson, Agnes Morley Cleaveland, Stanley Vestal, and Ernie Pyle. And there are others who, while not so widely known, are experts in their lines or participants in the events described.

Everyone will have his favorites among the wealth of tales in the collection. Some of the most interesting are those about the first printing press in New Mexico, cattle drives, geology, Spanish cooking, Navajo foods, place names, Indian politics and humor, Carlsbad caverns, the Peralta "land

grant," vaquero language, frontier manners, and the sketches of the lives of Clay Allison, Charles F. Lummis and Eugene Manlove Rhodes. With such a wide range to be covered, most of the features are necessarily brief. But they are not condensations, and many are rich in the glamor, the legend and the humor of New Mexico.

There is good writing in THIS IS NEW MEXICO, and some valuable Southwestern material. Fitzpatrick is to be commended for selecting the group of articles and making it available in book form. Attractive features of the excellently bound and printed volume are the map endpapers, showing the localities of the stories included. The book is one which anyone interested in the story of New Mexico will

want to read. Sketches illustrating the section headings were made by Wilfred Stedman.

Rydal Press, Santa Fe, New Mexico, 1948. 328 pps., \$3.00.

BOOK BRIEFS . . .

The California Zoological club has issued the first number of its Proceedings, designed to publish articles in all fields of zoology. The numbers will be published irregularly and each volume will be closed when a size convenient for binding has been reached. The volumes of the Proceedings are offered to individuals and libraries at \$5.00 per volume. Only 150 copies of the first issue are available for distribution, and no exchange of publications is possible. All inquiries should be addressed to the Editor, California Zoological club, Box 3037, Stanford University, California.

Katherine Buoy Keeney of Portland, Oregon, has published a collection of her poems under the title, *Through Life's Prisms*. Included in the attractive volume are some which have appeared on Desert Magazine's poetry page.

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